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ADVENTURE



the ROBOT MEN OF BUBBLE CITY

PETER WORTH

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ADVENTURE ON THE PLANET PLUTO**

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CONTENTS

JULY 1949

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Stories

- THE ROBOT MEN OF EUBLE CITY** (Novel—30,000) by Reg Phillips 6
Illustrated by Julian S. Krupa
Men had finally reached Pluto, and colonizing was an easy problem — if the robots allowed it!
- FIVE YEARS IN THE MARMALADE** (Short—5,000) by Geoff St. Reynard 58
Illustrated by Bill Terry
It was a neat problem: could the Martian waste something that didn't exist?
Of course not, but . . .
- TWIN SATELLITE** (Short—8,000) by Guy Archette 76
Illustrated by Red Rulk
It was a world of twins, and very confusing — for you never could be sure —
even of yourself!
- THE EYE OF THE WORLD** (Two Part Serial—Conclusion) by Alexander Blade 84
Illustrated by Bill Terry
The final hour had come; now the evil power of the Scroovask would
spread across the Earth . . .

Features

- | | |
|--------------------------------------|--|
| THE EDITOR'S NOTEROOK 5 | ITALIAN PIPELINE 142 |
| ACCA LARENTIA 57 | GIN RUMTY GENIUS 143 |
| CENSUS PHOTOGRAPHER 49 | PROSPECTING — '49 STYLE 144 |
| THE ARCHERFISH 47 | ABLUTION 145 |
| THE BEAKER FOLK | FASHION PLATE—2000 B.C. 145 |
| ABRACADABRA 63 | VIBRATING CLOCK 146 |

Front cover painting by James S. Seltzer, illustrating
a scene from "The Robot Men of Euble City."

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The Editor's Notebook

A CONFIDENTIAL CHAT WITH THE EDITOR

LAST WINTER Rog Phillips walked into the office and announced that he was on his way to California for a nice long vacation. We asked him if he planned to do any writing while he was out there. He shook his head and said that he didn't want to see a typewriter for at least three months. So with that firm decision in his mind, he left the chilly winds of Chicago for balmy California. We kept thinking about Rog wondering if he would be able to keep away from writing for even three months. Well, one month went by, then two. We began to think he meant what he had said. But then—the third month was only a week gone when a thick manuscript was delivered on our desk one morning. Along with the manuscript was a letter from Rog, stating: "So help me, I tried to do nothing but have a good time—but I found that I can't enjoy myself without writing! So for the past month I've been working on this novel. Hope you like it!"

WE SAT back and smiled. Now we felt better. Even the warm sunshine of California (so they tell us in the papers!) couldn't entice Rog away from his typewriter. And after we read "The Robot Men of Bubble City" we felt even better than before. For we had read a terrific story. We turned the novel over to see cover artist James B. Settlen. And when Settlen finished reading the story he took his brush and began the masterpiece you've been admiring as this month's cover. Taking both together we think makes a terrific combination. So we'll let you go to the story now, and after you finish it, drop us a line.

A FEW months ago we presented a unique short story by Geoff St. Reynard, entitled, "Blue Bottle Fly." Already your letters have indicated that St. Reynard turned in what may well prove to be the best short story of the year. We're not going to dispute that point, we'll let you readers keep piling up the votes. But in the meantime, we've got another new St. Reynard story for you, and like "Blue Bottle Fly" it is in the "unique" class. The story, "Five Years In the Marmalade" is

the story of a Martian and two space-hardened Earthmen. But actually, it is the story of the Martian, and his peculiar ability to create things, and how the two Earthmen—but that's where we stop. One thing we ask of you. Don't read the end of this story first. We know you have the habit sometimes of sneaking a look at the last page of a story. Heck, we do the same thing ourselves. But take it from us, you'll spoil a terrific ending if you cheat on this yarn. So sit back and start from the beginning. And after you finish, let us know how you liked it.

GUY ARCHETTE is always a top name to include on our contents page. And this month Guy returns with a neat interplanetary yarn, "Twin Satellite." This is the story of a world where everything existed in pairs. Nothing complicated about that? Well, for example, how would you tell a friend from an enemy? Or—but that will give you a rough idea of what we mean. Anyway, we think you'll get a big kick out of the story, so go ahead.

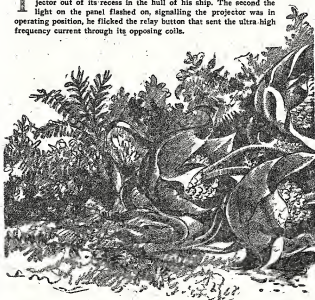
FINISHING up this month's lineup is the concluding installment of Alexander Blade's great serial, "The Eye of the World." If you were fascinated by the first half of the novel (and we'll bet you were!) then you'll be even more thrilled when you read the concluding chapters. For now you'll find out just what the evil Seraverek really is, and the dread secret that Val Pakkerman has been guarding for years. You'll also follow Allan Burgess on his perilous attempt to defeat the weird power that threatens the world. And then—you'll sit back and agree with us that Blade, as usual, has turned in a great story.

NEXT MONTH we'll present one of the most unusual time stories you've ever read. "The Man Who Laughed At Time" has a new twist, a different theme to an old idea. It's something you'll sit back and think about. So keep your eyes peeled for the next issue. See you then.....WLH

The ROBOT MEN of BUBBLE CITY

Colonizing Pluto was the next step man had planned — but the robot men had similar ideas . . .

TURLOGH Hogan pressed the stud that raised the parabolic projector out of its recess in the hull of his ship. The second the light on the panel flashed on, signalling the projector was in operating position, he flicked the relay button that sent the ultra-high frequency current through its opposing coils.



**By
ROG
PHILLIPS**



As she ran through the plant forest she could feel slimy tentacles reach out for her.

The wave of nightmare figures that were rushing toward the ship seemed to melt. Their guns exploded, sending fragments of metal in all directions. Then all was quiet.

Slowly a red flag appeared above a large rock. Turlogh frowned. Then he smiled. Red must be the emblem of surrender to these creatures. White was the emblem on earth.

The scene vanished. Turlogh turned over in his sleep and began to snore gently.

The scene reappeared; but this time instead of waves of the creatures, a battery of high frequency projectors rose above the edge of the gulley two hundred feet away. Turlogh laughed. They were harmless. The hull of his space ship was cushioned from the interior by sound absorbent layers. The ship was designed to nullify the lethal effects of ultra high frequency.

Again the scene vanished. This time it was gone for some time. Turlogh woke up and listened to the quiet hum of the air conditioner. No other sound was audible. He tried to remember what he had been dreaming about. Finally he gave up. A soft snoring signalled his return to unconsciousness.

Finally the scene came back. This time the most beautiful woman he had ever seen climbed over the edge of the gully and walked slowly toward the ship. In her arms she carried a regulation atom grenade of the type that attaches to the hull and explodes in ten minutes.

He fingered the relay button, and then changed his mind. He could not kill this woman. He pressed another stud that shot anesthetizing gas toward her. She stumbled and fell, and the grenade rolled along the ground, its pin still in place. He watched the gulley, waiting for some other form of attack.

The scene vanished. After awhile

Turlogh dreamed again. This time he was standing behind a large boulder. He had heard a noise and his new "memory" told him a man was creeping up on him on the other side. A sound as of a pebble moving told him the man was just on the other side of the boulder. Taking a chance, Turlogh jumped out in the open and fired. The bullet caught the man in the chest and he went down.

THE TWIN of the dead man appeared, walking down the path. He was carrying a white flag on a short stick, so Turlogh withheld his fire. When the man came to a stop by his fallen twin he looked at him as if puzzled. Then he asked, "Why did you shoot me?"

"I didn't shoot YOU," Turlogh answered.

"Yes you did," the man insisted. Then pointing at the corpse, "That was me until you killed it. I can't understand. Why do you kill?"

"I kill because I don't want to get killed myself," Turlogh replied.

"Why should that bother you?" asked the man. "Don't you have other bodies?"

Turlogh woke up with a start. The memory of the dream was vague, but the words, "Don't you have other bodies?" was vivid in his memory.

He lay there in the darkness, listening, and trying to recall the dream. The elusive wisps of thought slowly fell into place, until every detail of the dreams returned.

Then he tried to rationalize the dreams, but no scheme he knew of seemed to fit. Possibility of outside origin? He shrugged off the thought, but it returned. The ship was in a closed orbit, circling Pluto and about three hundred miles above its surface. It had been in this closed orbit for three weeks, earth time, while topo-

graphical maps were being made of the surface of Pluto and the planet's solar constants were being measured.

Pluto was rough. With a mean diameter only two hundred miles greater than that of the earth and a period of rotation only one minute and twenty seconds longer than that of earth, and acceleration of gravity at the surface almost exactly the same as that of earth, its mountain ranges dwarfed even the Everests of the home planet. The highest peak so far measured sent its granite spikes sixty-three thousand four hundred and twenty feet above the mean surface.

And in contrast there were tremendous depths that seemed almost bottomless. Great yawning chasms that were miles in depth. No oceans could have ever covered this world or the chasms would have been levelled off, filled with ice.

Solidified gas covered most of the surface to a depth of several feet; but in three areas the rocky surface was free of this covering, and around the edges of these three areas the snowy deposit gave off steamy tendrils that proved the cause of the bareness to be internal heat.

Large deposits of radioactives had been the verdict of the solar survey ship that had first come here in 1987, ten years before. They ought to know since they were equipped to identify any type of radiation.

In fact, that was why Turlogh and his partner, Gar Nichols, had come this far. In fifteen years of space prospecting they had amassed enough wealth to take the big gamble, as they called it. Radioactives were found only on planets of large size. The asteroids had been kind to them, or perhaps the gods of chance. Three million tons of pure copper, a million and a half tons of pure silver, and one fifty ton diamond had been their

haul from the asteroids. All had been neatly dropped into the Arizona desert country except the diamond, which they had taken aboard through the cargo hatch and brought down easy.

NOW, WITH fifty billion dollars to their credit in the world bank, and a new ship around them, they were making a try for the radioactives of Pluto.

Turlogh reviewed all this in his mind as he lay quietly in his bunk. Life on Pluto was impossible, so the dreams could not have had an outside origin. He decided to say nothing to Gar lest his partner think he was getting space wacky.

The alarm clock began to buzz in its niche just over his head. He shut it off and climbed out of the bunk. Today was to be the big day. They had decided to land on a level stretch in the center of the largest warm area. The rocks there were only fifty degrees below zero, Centigrade.

In three more hours the instant would arrive when the landing trajectory would be started. Meanwhile, there was breakfast to occupy the time. Gar was already in the dining compartment, two no. 7 breakfast containers from the cold storage room warming in the heaters designed for them. His huge frame was sprawled out on one of the built in benches, and he was busy rechecking the figures for their landing recoil charges.

He looked up, a friendly smile on his overly wide face, at Turlogh's entrance.

Then, taking in Turlogh's expression, he asked, "What's the matter? You look like you had a tough night."

"I did," Turlogh answered. "Did you have any dreams last night?"

"Not a one," Gar said. "Why?

Wait a minute. I'll bet you had some sort of remarkable dream that you can't explain, and you are wondering if I did, too. If I did, then you could explain yours as the result of 'something we do, no doubt'. Am I right?"

"Partly," Turlough admitted. He gave a full account of his dreams during the course of the meal. At the end, Gar had to admit that it might be wise to take every precaution after landing. It was just possible that they might be running into something out of the ordinary.

So it was with high pitched excitement that they pressed the stud that released the measured blast from the forward rockets which would slow them down and start the ship on its downward journey.

Strapped in their seats they were safe against sudden velocity changes up to eighty miles an hour. The springs that held these seats were of the ratchet release kind. That is, any sudden compression or stretching of the springs was held by a ratchet mechanism and slowly released by shock absorbers. The chairs were held in suspension in the center of the pilot room, the control panel rigidly connected in front of them.

The landing trajectory was started long before the landing spot could come into view, but when it did come into sight the visual control mechanism could be operated. This was a development based on the same principles as the Norden Bomb Sight. Split images of the landing spot were kept in line in the eyepiece. The automatic mechanism did the rest, bringing the ship to a stop almost without a jar.

The ship came to rest in the center of a table of flat rock that was perhaps a hundred yards wide and twice that long. As the last echo of vibra-

tion died to inaudibility the two men unstrapped themselves and climbed out of their seats. Then they went close to the viewports to get their first good look at the surface.

The tableland outside was sharp and jagged. The lava, perhaps millions of years ago, had cooled without the tender care of atmosphere, with its convection currents and constant pressure. Huge lava bubbles had formed, solidified, and broke, leaving almost razor sharp edges of the broken bubbles which gave the whole a chicken wire effect. This was spoiled somewhat by the many fine cracks that spread in all directions, cracks caused by the rapid cooling of the upper few inches of lava while that underneath cooled more slowly.

No erosion had ever been possible. The scene had no doubt remained unchanged for unknown centuries.

TURLOUGH looked out the port, his eyes fixed in staring intensity. Gar, turning to his companion to make some casual remark, noticed this and asked, "What's the matter, Turlogh? You look like you've seen a ghost."

"I have," remarked Turlogh, "This is the spot where the ship was in the dream, down to the last detail!"

A grim look appeared on Gar's face. "Then it was no dream," he said. "Suppose there is some super intelligent race on or in this area. We coasted around this planet for three weeks. They would know about it. Now suppose they contacted you mentally and posed several problems to you. In your dream state you would solve them just as you would if they were real. That way they could find out what we have in the way of weapons and also our ways of doing things. Then they would figure out

how to take care of us when we land without making any mistakes."

"That's the way I have it figured myself," Turlogh answered slowly. "What'll we do?"

Gar didn't answer at once. Finally he said, "Suppose we just squat here for twenty-four hours and see what happens, all ready to blast off if we have to?"

Turlogh shook his head. "No," he said with a note of finality, "There are only two things to do. We either get away now and report evidence of life on Pluto and try to get an expedition to come here, or we assume that whatever form of civilization probed my mind will be friendly, and go ahead and explore. The last is foolish, but we got rich being foolish, and I am inclined to carry our luck this one last mile."

"So am I," agreed Gar. "Let's go."

The two men donned vacuum suits with oxygen tanks good for twenty-four hours and, with the latest type of sub-machine guns under their arms, stepped onto the planet. Turlogh kept his eyes warily on the lip of the tablerock, but nothing appeared.

Gar's voice came through Turlogh's earphones. "I feel foolish. Here's a planet that could not possibly support life of any kind, and we are acting like we were in the middle of an alien city, expecting some creature that can live in a perfect vacuum to be hiding behind every boulder."

Turlogh chuckled and added, "All on the strength of a dream, too."

The tension somewhat relieved, the two men walked over to the edge of the table and inspected the slope that dropped down at an easy angle for almost a mile, to bring up at the base of a cliff.

The cliff was honeycombed with large openings which might be shal-

low or deep. It was impossible to tell because the few rays reflected from the surface under direct sunlight into the round openings were not enough to bring out details.

Turlogh, who had been carefully scanning the slope, pointed to a large boulder half way down. "That's the boulder in the dream," he said.

"Well," Gar replied, "we haven't met anything yet. Evidently they have rejected everything they tried in the dream and have something new up their sleeves. Should we go on down?"

Turlogh's answer was to start down the slope. The two men carefully picked their way. One slip and they might puncture their suits, letting the air out. They had each had the space bends in their years of adventure at some time or another, and felt the terrible sensation of the air in their lungs spreading and pushing against their ribs, the prickly feeling of thousands of tiny blood vessels bursting over the skin, and the two to three weeks of constant itching as they healed. Anyone who has experienced this once will forever after go to great lengths to avoid the possibility of it happening again.

THE TINY SUN, now directly overhead, sent knife sharp pencils of light over the slope. Shadows were black patterns woven into the scenery. Visibility was really worse for details in direct sunlight than it would be later when the starlight would not have to compete with it. After the sun went down the iris would open up full, letting in the faint reflections from cavities in the uneven terrain.

Gar and Turlogh rounded the huge boulder half way down the slope and kept on. After almost an hour of careful stepping they neared the

base of the cliff. And directly in front of them was a perfectly round, flat, metallic cover, obviously artificial, held in place by two heavy hinges on the right side and a clamp on the left that was very similar to those which hold cold storage doors in place.

They paused and looked at it. There it was. Set in the face of the cliff, silent, somewhat sinister. The utter silence of space suddenly became a living thing, impressing on them the fact that home was millions of miles away, and that here was the entrance to something alien. Something that knew they were there.

Gar turned and looked up the slope as if estimating their chances of climbing back up unmolested. Then he faced the door once more and spoke into his microphone. "You open the door, Turlogh. I'll be ready to blast anything inside. Stand to one side so that if there is air inside, the door won't hit you."

Turlogh stepped carefully forward and pulled down on the door clamp until it cleared the door. The door remained motionless, so he pulled it open. Inside was a chamber lit by an overhead globe of the cold light variety. Ten feet in was a similar door.

The two men stepped inside and closed the outer door behind them, clamping it shut. Almost instantly their vacuum suits started to collapse as air of some sort began to fill the chamber.

The inner door swung open slowly, revealing a well lit tube station with one almost conventional looking car standing on the rubbery looking road surface.

"Should we take a chance on the air?" asked Gar.

"I'll do it first," Turlogh replied, taking the front cover off his helmet. He breathed deeply several times and

then nodded.

Gar took off his face plate and sampled the air. It had a slight tang to it, evidence of fair ozone content.

"I think we might as well leave our vacuum suits and one of the guns here in the airlock," Turlogh said. "Undoubtedly it's known we are here. We're being handled at the end of a ten foot pole so far. They must think we are as dangerous as a bag full of wild cats or they would have met us up here. If we run into trouble it would be better to have our suits safe."

When the suits and the gun were in the lock, Gar closed the door and started studying its details, hoping to find some way to prevent it from being opened.

Turlogh joined him in the examination. The lever that locked the door in position also closed a valve that let air into the lock. When the door was locked closed a motor started somewhere in the wall, and ran for several minutes. This probably pumped the air out of the lock, back into the cavern, so that little of it would be lost. That which was inevitably lost could be easily replenished by scraping up frozen air from the surface of the planet and bringing it in through the lock.

Gar unhooked the valve lever and hid it on the upper edge of the door. "That ought to do it," he exclaimed with relief. "Now the pressure against the door will keep it closed. Anyone who tries to open it will have to go back and get a new lever arm for the valve unless they think to look above the door."

To prove his point he tried to open the door. It resisted all efforts.

NOW that their suits were safe they turned their attention to the car. Instead of a steering wheel

it had a stick, like the stick in a plane. Cautious experiment demonstrated that moving the stick forward caused the wheels to turn to the right, backward caused the wheels to turn to the left, moving the stick to the right caused the car to move forward, and moving it to the left caused the car to back up. The motive force was impossible to determine. The hood was locked. There was no perceptible vibration that might give some hint as to what powered the car.

Finally, with a fatalistic shrug of his shoulders, Gar swung the lever to the right and said, "Well, Turlogh, here we go. If we'll come out, nobody knows."

The roadway spiralled steeply downward, and the car gathered speed quickly, settling at a constant that was regulated by the stick.

Both men kept their eyes fixed on the tunnel ahead, ready for any sudden change in the monotony of the smooth, curving walls. After half an hour the road straightened out and levelled off. Gar slowed the car to a crawl. In the distance could be seen the end where the ribbon of roadway left the tunnel.

"Slow down," muttered Turlogh. "Let's see what we're getting into."

At the mouth of the tunnel they came to a stop and got out of the car. Turlogh kept the sub-machine gun ready for instant use, but as the scene outside the tunnel came into view he dropped it to his side in amazed awe.

As far as the eye could reach spread the fairy towers of a city that beggared description. Buildings so tall they seemed like swaying stems of some giant plant. Spiderwebs of roads that wove in and out among the buildings. And everywhere there was movement as millions of cars and moving figures went about their busi-

ness, apparently oblivious of the two earth men.

It was at once evident that the gigantic city was built in a huge bubble, perhaps twenty miles in diameter. The stem-like buildings that stretched upward to impossible heights also stretched downward to the bottom of the bubble, miles below; and the roadway on which they stood struck out toward the nearest building, almost half a mile away.

Gar grinned at Turlogh. "You might as well stop packing that toy around," he said, pointing at the sub-machine gun. "It won't do anything but get us into trouble. We're either living on borrowed time already or there is probably a welcoming committee, just around the corner someplace, waiting for us to lay down this gun and show signs of being good."

"You may be right," Turlogh admitted. "We stand about as much chance of doing some good with this gun as a gangster would have against the whole United States Government. The sensible thing for us to do is turn right around and get out of here until we can bring enough people with us to stand a chance. I think we could make it if we jammed that airlock by wedging the outer door open as we left."

"I'll bet you a hundred to one our ship is swarming with these foreigners right now," Gar said.

"Maybe so," Turlogh answered. "They probably have several airlocks to the surface."

THEY climbed back into the car and moved slowly out into the bubble, watching the road ahead for signs of the welcoming committee they were sure was ahead.

"Do you think it possible for a bubble like this to form in solid rock," Gar asked thoughtfully, "with

the gas that caused the bubble being made up of breathable air, evolve life that eventually produces a civilization like this one, keeping normal temperatures over millions of years? Or do you think this race moved into the bubble and made it over, including the atmosphere, and imported atomic power from someplace?"

"It's certain they moved in," Turlogh replied. "The metals for their machinery, the water necessary to produce life, and the power necessary to keep this thing running, all have to be imported. The question in MY mind is whether this race originated on Pluto, or came from some other planet. I'm wondering if it is possible that deep down in Pluto there might be huge caverns where life originated and evolved into an intelligent race.

"Take those airlocks, for example. Could a race evolved here conceive of the vacuum of outer space? Or would they open a shaft to the surface and let their air escape? I think this race must have come from some other planet and picked this bubble for a colony. No doubt the other warm spots are also over similar colonies."

"No doubt about that now," Gar commented. Then, spying a figure standing in the middle of the road far ahead, "Look! At last we contact the enemy. Don't shoot 'till you see the mottled red of their eyes."

He speeded up the car slightly, and both men kept their eyes fixed on the figure ahead, intensely curious as to what the appearance of these unknown creatures would be like.

The figure as they drew closer turned out to be that of an ordinary man, arm raised in a signal for them to stop. Gar brought the car to a stop about ten feet in front of the man. He was dressed in the same kind of clothes as were Gar and Turlogh. His

face was conventional, with a welcoming smile on it.

Behind him the road branched off to disappear through the wall of one of the buildings. After the car came to a stop the man lowered his arm and walked forward to meet them. His voice, normal and friendly, called out, "Hello, there. Welcome to Bubble City."

"Hello yourself," Gar answered. "I didn't know that the United States had a colony on Pluto. When did all this take place?"

The man reached the side of the car and extended his hand, saying, "My name is Gar Hogan."

"Gar Hogan!" exclaimed Gar. "My name is Gar Nickols and my partner's is Turlogh Hogan. Don't tell me your first name is mine and your last name is Turlogh's!"

"By a strange coincidence," the stranger said, smiling, "it is." Then, stepping on the running board of the car and pointing toward the opening in the building, he added, "Won't you step into my parlor?"

Gar gave him a quizzical look and started the car. Then casually he asked, "Don't you have a sister back in New Jersey named Doris?"

"Sister?" the stranger asked, puzzled. "What's a sister?"

Gar stopped the car. "Look," he said resignedly. "I don't know who or what you are, but I know you are not a human being."

The stranger who called himself Gar Hogan stepped down from the running board, the welcoming smile still painted on his face, as though he knew no other expression.

"But I am human," he said earnestly. "Perhaps not human like you two are; but human just the same."

"What do you mean by that?" Turlogh asked. He now had the gun

pointed at the chest of the stranger, ready to pull the trigger.

THE STRANGER shrugged his shoulders. "You have machines and various robot forms to do work for you. So do we. In your minds I have seen huge ships that sail on vast pools of liquid, long strings of track-riding carriers, and all the other signs of intelligence. It is a different kind of world than this in our bubble, and so great that you cannot fill it completely."

"Go on," Gar said. His mind was in a strange turmoil of suspicions which he could not pin down, fears as from some danger only instinctively felt, and puzzlement.

The stranger smiled vaguely now, but continued. "With all these similarities we are still far apart. In your mind is a queer set of vague, amoeba-like, fears and instincts. Illogical thought processes fill your thinking. The urge to destroy as a means of perpetuating the robot figures you are now inhabiting leads me to suspect they are the only ones you have. Yet that would be the height of foolishness,—to go on an interplanetary voyage such as you have, without spares and specialized bodies for different tasks."

The stranger frowned for the first time. His frown was clumsy and appeared slowly in a disconnected pattern, one face muscle after another moving exploratively until it settled into the pattern of a frown. Gar and Turlogh watched this transition of expression with horrified fascination. It seemed almost as if the stranger's face were being molded into a new shape by some unseen sculptor. Then he spoke again.

"Every sign points to something so strange and startling that I can't

trust my conclusion. All the evidence points to your minds being entirely contained within the compass of your present bodies. I read in your minds the conviction that if your present bodies are destroyed you yourselves are destroyed! Am I right?"

"Not exactly," Turlogh answered him.

The stranger looked at him intently for a moment. "Oh, I see," he said. "You believe that the thinking entity that is you will be preserved after the destruction of this machine it lives in, but without recourse to other such machines. No? Oh. You have different theories about it. Hmm. Very interesting. But at the foundation of each theory is the assumption,—the conviction, I should say, that this psyche, or soul, resides IN the body it directs. I wonder if that can be true in your case?"

"What makes that sound so unbelievable?" asked Gar.

"Perhaps just the newness of it," the stranger replied. "With me it is different. And I wonder if you might not be mistaken about your nature? I inhabit thousands of bodies at the same time. Or rather, I don't inhabit them, but am aware THROUGH them. To be sure, they are strictly mechanical, while yours seems to be organic in structure. That is new to me also. Each of my units of awareness and action has its own sets of reflexes, and its own focus of awareness. Yet I am able to concentrate my over-all awareness in just one of them as I am doing now, as well as spread it out over all of them and carry on thousands of independent trains of thought simultaneously. I was just wondering. Suppose I myself were without awareness, but my thought processes continued just as always, but would be ignorant of my true

functioning in relation to them. Hmm—."

"Then," Turlogh exclaimed, "You are in effect a mass consciousness!"

"No," he answered, "Not a mass consciousness. My vehicle of existence is not the bodies I direct, but independent of them. If every body I have in action, and all those in reserve, were to be destroyed, I would continue to exist. And I am wondering if perhaps you are not, or could not be made to be the same!"

"You mean you are a spirit, or a disembodied intelligence?" asked Gar.

"No, I see what you mean. But my vehicle of existence is quite material." He became silent.

STRANGE thoughts began to run through Turlogh's mind. Each of the tall, reed-like buildings housed a gigantic brain. Each was an individual entity, and the millions of moving figures that swarmed the ribbon-like roads that swung from building to building were just the arms, eyes, feelers, and instruments of the vast, unmoving brains in these buildings!

The same thoughts were coursing through Gar's mind.

The two men looked at the buildings with new interest.

"How did all this begin?" asked Gar.

The stranger put his foot on the running board of the car in a purely human gesture. "We don't know," he answered simply. "Logic tells us that if we had no moving units we could not make them. Logic tells us that at one time we must have been different. But, as a matter of fact, none of us can remember when we first began. Our minds, as they grew in awareness, found the robot units already in existence, and machines for their manufacture already operating.

We could like it to be. For example, change the type of robot that was made merely by imagining what we would like it to be. For example, the figure standing before you is an imitation of your own figures."

"Has it ever occurred to you that you might have yourself been built by humans such as we are?" asked Turlogh.

"No," he answered slowly. "As a matter of fact you are a new concept to us. It has never occurred to us that there might be living creatures able to reproduce, that were each moving beings with self-contained thinking powers."

"How long do you know you have existed?" asked Gar.

"We don't know that, either," he replied. "We had awareness for perhaps a million of your earth years before we finally knew our own nature. As a matter of fact, we passed through much the same stages in our thinking as you seem to be going through. At one time we each thought the seat of intelligence was in the body and kept on after the destruction of the body. It took us a million years to realize we were the buildings and what they contain. Even then your planet was still glowing with its own self light."

"That's interesting," Turlogh said. "You say that you at one time had the same theories about reincarnation, immortality, and so forth, that we now have?"

"Not exactly," the stranger replied. "You see, we always had complete memory of our former lives. Also, our consciousness extended to many robots at the same time. We did have a theory that we were the mass awareness of several individuals, a sort of spiritual fluid that flowed from one mind to another. In fact, we had men-

tal battles for possession of all the robots for thousands of years of your time until we turned our thoughts inward and studied the details of our structure and discovered that such struggles were meaningless, since we could get any number of robot bodies we wished by a simple act of will, from our own selves.

"You have no memory extending beyond your present body, nor does your awareness extend to other bodies. Yet that may be due to your incomplete development.

"We of the bubble would like to conduct tests to determine your nature. We would like to do that because it might reveal our own origin."

"What kind of tests?" asked Turlogh suspiciously.

"Tests in shielding," the stranger replied. "If your entity is completely self-contained they will have no effect. If they are still back on earth, then complete shielding will cut off their contact with the body so that it ceases to think."

GAR AND Turlogh looked at each other. There was uncertainty and lingering suspicion of this stranger in their glance, and a dawning interest in the whole bizarre mystery of this strange bubble civilization.

"What do you think?" Gar asked Turlogh.

"I'm wondering if we shouldn't conduct a few tests of our own first," Turlogh replied.

"For example?" Gar queried.

"Blasting this fellow out of existence as I did in my dream," Turlogh grinned. "If that doesn't make him mad, then he is all he claims."

"How would it be if we just made a break for it and got away from this place?" Gar suggested a trifle wist-

fully.

"I doubt if we could," Turlogh answered. "This car is probably one of their robot bodies. I can see now that they made it in imitation of our memories of surface cars on earth. They sucked us in neatly just like in the old tale of the wolf that put on a sheep skin to wander into the flock and pick out a victim."

"This place gives me the creeps," Gar said. "Maybe even the road is intelligent, and would curl up in front of us if we tried to get away. Suppose we make a deal with them."

"What kind of a deal?" asked Turlogh.

"One of us go back to the ship and the other stay for the tests. Then if something happens, whichever one of us is in the ship can blast a hole in this bubble and at least get revenge."

Turlogh thought this over for a moment. "O.K.," he said.

"That is O.K. with me, too," the stranger put in. "I'm convinced you are rational enough to not be a threat to our existence so long as we do not destroy either of you."

Turlogh pulled a coin out of his pocket and said hastily, "I'll take heads."

Gar quickly grabbed the coin and looked at it. Just as he suspected, it was the double-headed nickle that Turlogh carried around for a good luck piece.

"O.K., O.K.," Turlogh chuckled. "We'll make it honest."

Gar gave him back the nickle and reached in his own pocket, looking questioningly at his partner.

"I'll still take heads," Turlogh said.

With a quiet grin which he tried to hide, Gar flipped a coin in the air. It landed on the roadway outside the car. The two men leaned over to

look at it.

"Tails!" Gar exclaimed triumphantly, and climbed out to retrieve his coin. Straightening up, he slipped the coin back into his pocket and said softly, "So long, Turlogh."

The car, now of its own volition, turned and sped back into the tunnel. Gar watched it go, the hand in his pocket idly fingering two coins; one, a quarter with two heads, the other a half dollar with two tails. When the car vanished from sight he turned and walked toward the entrance to the tall building, the stranger following.

Inside, about twenty feet from the outside wall, were several pillars six or seven feet in diameter, placed in an orderly row. One of these had a section of its side swung back, exposing a smooth bore, and a flat surfaced disc of a floor, even with the floor outside.

The stranger stepped inside, followed by Gar. Noiselessly the opening closed. At the same time Gar suddenly felt, weightless. This weightlessness lasted for almost a full minute. Then it was replaced by tremendous weight that seemed to bear every atom of his body toward the floor.

As he fought the pressure his mind put the evidence of his senses together. This must be an elevator. It had at first been sinking in almost free fall. Now it was coming to a gradual stop at an acceleration of about three gees. To verify his conclusion the walls of the cylinder, which had been perfectly smooth with the blurred smoothness of terrific speed, began to show irregularities which rose from the floor and disappeared far up the shaft.

The piston came to a stop and the wall swung out again to reveal a scene

which was the exact duplicate of the one above that they had left. Already Gar knew he was lost. The floors were not numbered in any way and there were thousands of them.

Now Gar followed the stranger along the inside wall of the building, passed through a swinging door with him, and entered a vast laboratory. Strange transparent monstrosities were all about him. Huge vats with bubbling liquids, almost familiar looking tangles of wires and vacuum tubes, and long rows of instrument panels.

Several queer looking robots were wheeling a large square box into the room from the other end. The man motioned Gar to enter through the small door in its front. Gar did so, with him following. Inside was a desk and a chair. On the desk was a writing pad and a pencil.

"You will start writing," the stranger said. "It doesn't matter what you write just so long as you keep on writing steadily. We will soon be completely insulated from the outside. I will cease to be conscious of what goes on in here. If you are self-contained you will not lose consciousness. The evidence of what you have written will be proof."

Gar sat down and started to write.

TURLOGH reached the airlock without mishap. It was just as they had left it. He hooked up the valve lever again and entered the lock, donning his vacuum suit before closing the inner door.

As the outer door swung open he stepped out, and with a single backward glance climbed up the slope to the space ship. It, too, had been untouched since they left it.

Inside once again he took off his vacuum suit and hastily made the

rounds on an inspection tour. Everything was just as they had left it.

Now doubts began to assail him. This bubble city seemed too pat and too advanced. Building a creature, a robot that looked human and talked the language they themselves used, took the workings of a very superior mentality. One so superior that they could not hope to outguess it.

On the spur of the moment he decided to blast off from the surface and resume the old orbit around the planet. Then it would be possible to escape and notify the earth of this strange race if something sinister developed. At most it would mean a delay of only a few hours in picking up Gar, and Gar would approve of his precautions.

Long ago he and Gar had considered the possibility of a situation similar to the present one, and decided that the safety of future explorers was of more importance than the life of one of them. And Gar could contact the ship by radio once he put his vacuum suit on again.

The next eight hours was spent in the takeoff and the almost dainty spurts from the rockets that put him back in the original orbit. By the time the tablerock in the center of the warm spot again came into sight, the ship was an inert, swiftly moving satellite of Pluto once more.

Turlogh had put the ship into orbits around nearly every planet in the system, and each time he had the same thought. If he were to die the ship would circle endlessly forever unless some body collided with it.

As the tablerock flashed by below he examined it through the ship telescope. Gar had not come up yet. It would be another eight hours, thirty seven minutes, and ten seconds, be-

fore the spot would be visible from the ship again.

Turlogh yawned. Turning the radio receiver on to the suit wavelength, so that it would wake him up if Gar should try to contact him, he undressed and stretched out in his bunk. Soon he slept. This time his sleep was dreamless.

GAR KEPT on writing even after the stranger slumped to the floor unconscious. He wrote whatever came into his head, Lincoln's Gettysburg Address, nursery rhymes, and whatever came to mind. After half an hour the stranger stirred, then rose to his feet.

He read closely what Gar had written. Then he opened the small door and stepped outside, motioning Gar to follow him.

"One more test," he said in a matter of fact tone, "and then we will be satisfied."

Another machine had been wheeled into the room. It was a chair with a hood for the head, something like those in beauty parlors back on earth.

Confidently Gar sat down and allowed the stranger to lower the hood over his head. Almost the next instant, it seemed, the hood was lifted.

He stood up and swayed dizzily. The stranger caught him, and supported him until the wave of dizziness passed. After that one spell his mind cleared like magic. His senses seemed much sharper than they ever had been before.

"We are completely satisfied," the stranger said smiling. "You may now return to your friend in his ship. I believe he is circling the planet in your original exploration orbit. It is now just fifty minutes before he will reach the plateau again so that you can contact him."

"Thanks," Gar said vaguely. "I'd better get up there right away then where I can talk to him and let him know I'm O.K."

The stranger led him to the elevator, back up to the roadway, and waved a friendly farewell as a car bore Gar toward the surface lock. There Gar found his vacuum suit and was soon climbing the slope back to the tablerock.

He turned on the suit radio and tried to contact Turlogh. When he was halfway up the slope the ship appeared over the horizon as a slowly moving star. Almost immediately Turlogh's voice sounded.

"Hello. Am I glad to see you down there! Better take a nap in the airlock to the bubble, because I have to go around again to land," Turlogh said.

Gar stopped his climb. "Guess you're right," he answered. "I'll be almost nine hours before you land. I don't feel sleepy, but I can't stand out here that long."

"How did everything go?" asked Turlogh anxiously.

"O.K., I guess," Gar said. "I'm a little lost mentally. They seem only interested in determining that I am completely self-contained. They seem satisfied on that now, so they have lost interest in us."

"That's funny," Turlogh said slowly. "It would seem that they would be anxious to get better acquainted with us. But I'd just as soon scam out of here if it is O.K. with you, Gar. We can't get any radioactives here, and that's what we came for. Maybe we'd just better hand in a report on earth and forget the whole thing. Huh?"

"Maybe so," Gar replied, turning and starting back toward the airlock.

Once there, he opened the front

plate on his suit and relaxed. Almost instantly he was asleep.

And almost instantly he began to dream...

He felt queer and helpless. He was sprawled out on a smooth floor. The images of his surroundings seemed queerly distorted. Gradually they came into focus and became sensible.

He tried to get up. A queer, thrashing feeling shook his body. He turned his head to see what caused it and saw that his body was a long thing with several legs. Horror made him wake up. He did not move, but quietly felt of the comforting closeness of his vacuum suit, and let his eyes wander around the airlock to reassure his mind of his surroundings.

WHEN HE went back to sleep and the dream continued, it seemed all right for his dream body to have many legs. As if playing a game he moved them experimentally and found that if he concentrated on just the front legs the others always followed suit in a definite rhythm.

Having so many legs made him remember the old joke about the thousand legged worm and the beetle. The beetle asks the worm how he can keep so many legs moving without getting mixed up, and the worm says, "It's easy. I'll show you." So he concentrates on his legs and gets all mixed up. Forever after he stumbles. Gar chuckled in his dream, and walked around the room quite expertly by forgetting all about the back legs and concentrating only on the front ones.

In front of him was a mirror. He stopped in front of it and looked at his dream body. Its reflection in the mirror seemed real. He thought, "As long as I'm having such a screwy dream I might as well try something. I'll transfer my consciousness to the

image in the mirror and see how I actually look." Instantly he was looking at another figure; that of a spiderlike creature.

But he could still see the many legged one too. He seemed to be seeing with the eyes of both creatures at once, and the sensation of looking at himself from two bodies, and BEING in those two bodies, gave his mind a jerk, as though his personality were splitting and his brain with it. He woke up and climbed to his feet.

"If I go back to sleep I'll go nuts," he muttered drowsily, clamping the face plate of his suit back in place. His wrist watch showed he had been asleep four hours. Stepping out of the air lock he began a leisurely climb up the long slope toward the tablerock, resolved not to sleep again until this crazy planet was just a dot in the sky, and good old earth was on the nose of the ship.

A seemingly black cloud shooting up from the horizon to occult a large area of the star blanketed sky, signaled the arrival of the space ship before it appeared. Gar stayed in the protection of the large boulder near the top of the slope until the ship landed, then finished his climb to the ship.

Inside he hastily took off his vacuum suit and strapped himself in a recoil chair beside his partner, who then blasted off. The ship had rested on the planet just eleven minutes.

With the gyro stabilizers keeping the nose of the ship pointed away from the planet, and the stern rockets spurring a constant blast of four gees, the ship spiraled outward until Pluto became a vanishing dot in the heavens.

While this was going on Gar told the details of his strange dream to Turlogh, whose only comment was, "If we ever come here again we will

both go nuts. To hell with space travel. When we get home I'm going to find a nice quiet spot and spend the rest of my life fishing."

He said it as if he meant it.

While Turlogh was correcting the ship's course so that its free flight orbit would intersect the earth's -- hit at the right spot, Gar typed out a complete report on their visit to Pluto. Then both men turned in.

Turlogh lay in his bunk thinking of Gar's dream for a long time after he heard Gar's quiet snoring. A worried frown creased his forehead.

Gar went to sleep the moment he stretched out in his bunk. And again he dreamt. In the dream he seemed to reverse things. His recent wakefulness, the takeoff from Pluto, Turlogh,—all seemed like something he had dreamed while asleep, and his awareness through the two strange bodies in the large room seemed the reality.

HIS CONSCIOUSNESS seemed to split quite naturally into two separate and independent parts, one in the many legged worm, and the other in the spiderlike body. Almost like two separate individuals he sent each body on an exploring trip around the room. the worm found a door and pushed it open to reveal another large room in which several other bodies were parked, each different in shape, and obviously designed for different duties. A third focus of consciousness seemed to split off in his mind, and suddenly he could see this room from the position a humanoid body with flexible arms and many fingered hands occupied. He turned the head downward, and sure enough he was seeing that body as if it were his own, while at the same time he could see it from the eyes of the many legged worm.

"This is interesting work," he thought to himself.

He began to play a game. First he would concentrate all his consciousness in one of the bodies. Then he would concentrate it in another, exploring the capabilities of each.

Finally he tried to see how many of these bodies he could control and be aware through at once. There seemed no limit. A simple act of will created a whole new focus of consciousness, complete with visual, auditory, and reasoning centers.

From a great distance he heard a soft jangling that had a vague familiarity about it. One part of his mind puzzled over it while he was gazing with rapt attention at one of his bodies through the eyes of several of the others, and coordinating all the images into completely three dimensional image in his consciousness. It was fascinating to have a solid object seem to actually exist in its entirety in his mind.

That part of his mind that was puzzling over the bell suddenly remembered that it was the alarm in his bunk. He opened his eyes to the familiar surroundings of the ship. **THE DREAM DID NOT STOP.**

His mind had split again, and the part that was Gar was on the ship, while the dozens of other foci of consciousness in the various dream bodies continued without interruption!

He lay in the bunk thinking with one part of his mind. It was all clear now. He was no longer just Gar Nichols. Under that machine on Pluto he had become one of the Bubble men. How, he didn't know.

The part of him that was Gar stretched lazily and climbed out of the bunk. Turlogh was already up, so he dressed slowly, trying to decide whether he should tell his partner or not.

He decided not to until he found

out more. First he must find out whether his brain had been taken out of his skull and set in some vat in one of the buildings in Bubble City, or if there had merely been some change made in his brain so that it could direct and be aware through robot bodier on Pluto while still occupying his own body.

That would make all the difference in the world, for if the latter were the case he could forget about the bodies on Pluto and remain just Gar Nichols; but if the former were the case he was sunk. Or was he? Could he go on being Gar in one small part of his mind until his earth body died of old age, while at the same time he lived a fuller, many faceted life as a Plutonian? If that were what was in store for him it wouldn't be half bad.

A new angle occurred to him. If his brain were on Pluto his reflexes should slow down, because it would take time for impulses to travel from Pluto to the ship as it got farther and farther away.

"How far are we from Pluto now?" he asked Turlogh casually between bites of ham and eggs at breakfast.

Instantly Turlogh replied, "About a million and a half."

There was no time lag perceptible above the norm. Gar performed a little mental arithmetic. About nine seconds for light to reach them from Pluto. That should mean a time lag of eighteen seconds. It wasn't there, so—

Other parts of his multiple consciousness took up the problem. There was no time lag for his bodies on Pluto either! The part of his mind that was aware through the spider robot set out to find a robot of one of the other Bubble creatures.

HE FOUND a door that opened out onto one of the suspended

roadways and made his way to the nearest building. Halfway there a robot left that building and came to meet him.

Speaking in English it said, "I see that you have finally found out about yourself. Are you mad at us?"

"I don't know," Gar replied. "Where's my brain? In my body on the space ship, or in the building I just left?"

"In the building," was the answer. "That is, part of it is. The bulk of the Gar personality and the seat of consciousness were removed, leaving only the sections necessary to the functioning of your old body. When it dies you will still retain all your memories of your life as Gar Nichols, and while it lives you will be able to continue as Gar Nichols without any trouble."

"But how about time lag?" asked Gar.

"Time lag?" the robot asked. "Oh, I see what you mean. There is no appreciable time lag. Telepathy takes place by means of waves in the ether, which travel at the speed of about two hundred billion miles a second."

"Huh?" Gar exclaimed.

"It's like this," the robot explained. "Suppose you have an electron and a proton stuck together. In a line directed outward from the pair, in a direction such that the proton completely hides the electron, the field is positive. In the opposite direction it is completely negative. Give the pair a spinning motion, and every time it goes completely around, the electrical field in one direction has gone through one change from positive to negative to positive. If there is an electron somewhere it will be attracted, repelled, and again attracted, so that its movement will be slightly oscillating."

"Hm," said Gar thoughtfully, his

eyes idly watching a column of moving figures on a road below.

"These alternating waves of attraction and repulsion," the robot figure before him went on, "travel through the ether at the square root of the mean square velocity of the ether particles, which is about two hundred billion miles a second. Light travels at a hundred and eighty-six thousand miles a second because it is electron-proton in structure, and travels because of the unbalanced ether pressures against the electrons and the protons. An entirely different thing."

"Then I'll have no difficulty being myself when the ship lands on earth?" asked Gar.

"We can't guarantee anything," the robot replied, "but we think you will have no trouble at all."

"How is it possible for one mind to be aware through several bodies without getting everything mixed up?" asked Gar.

"In ONE body you have visual centers, auditory centers, etc.," the robot explained. "All of these operate without interfering with one another. You can be aware of what you see, hear, feel, taste, and smell, all at the same time. Creatures such as the reptiles and fowls on earth, who have independently functioning eyes, have two independent visual centers. It's just an extension of the same thing to have many bodies."

The robot hesitated for a minute, then said, "We have found out many things about ourselves by this experiment on you. Undoubtedly we were once living creatures just as you were. The parts of our makeup that were mysteries to us before are no longer that."

DURING the long journey back to earth Gar had plenty of time to

relax, as Gar, and concentrate most of his mental energies on expanding his abilities in Bubble City.

Turlogh suspected nothing, and as the days wore on and Gar seemed to have no more dreams, or at least did not mention having any more, the strangeness of their experiences on Pluto dimmed. It took him by surprise when Gar awoke from a day dream two days out from earth and casually remarked that he had decided to retire from space travel and get a place in the country where he could work on a few gadgets he had been thinking about.

All the suspicions he had had for the first few days on their journey outward from Pluto returned, but he shrugged his shoulders and remarked that it was a good idea. "I think I'll retire myself," he added. Then, grinning, "I think with Pluto we've seen about everything."

"Ah,—Turlogh," Gar said after several minutes of silence.

"Yeah?" Turlogh prompted.

"Ah,—about the report on Bubble City," Gar hesitated. "Suppose we don't hand that in, I just want to retire and live in peace, and if we turned that loose we would be on the front pages of every paper in the world and pestered to death to lead an expedition back there."

"Sure, sure," Turlogh said soothingly. "I agree with you. We're rich now and can do what we want. Fame would spoil it."

Out of the corner of his eye he saw Gar sigh with relief. He got up and went forward to peer through the forward telescope at the swiftly growing earth. A gong sounded, and he hastened to the shock seats with Gar. Almost as soon as they had strapped themselves in, the first deceleration blast shook the ship.

Twenty hours later the ship settled

in its berth at the Arizona space port. As the two men stepped to the ground a decrepit taxi wheezed up.

Gar climbed in, but Turlogh shook his head. "You go on into Denver, Gar. I'll fill out the trip sheet in the office." He winked at Gar to let him know he had not forgotten about keeping silent about Bubble City. Gar winked back and nodded his agreement.

Turlogh's stride was determined and resolute as he made his way across the field to the office buildings. The job ahead would be a disagreeable one to him.

He made a long distance phone call and then relaxed over a huge steak in the cafe. An hour and a half later a slim jet plane dipped out of the sky and came to a stop outside. Turlogh went out to meet its passenger, a skinny man six feet tall with a grey tweed suit. They shook hands.

"I'm Mr. Foster," the skinny man introduced himself. "The office assigned me to the case. They said you have a story to tell that is so fantastic it won't be believed."

"That's right," Turlogh said. "And I may not have another chance to repeat it, so I'd better tell it where it will go on a spool for future reference."

AN HOUR later he was bringing his account to an end. Leaning back in a swivel chair, his feet on a desk, he held a microphone to his lips while Mr. Foster sat across the desk and made occasional notes in a little book.

"There are several things that make me think Gar has become a robot of those creatures on Pluto," Turlogh was summing up his story. "First, Gar never used to go right to sleep. Now he is asleep the second his head hits the pillow. Second, he has always

kept busy on other trips, making various gadgets, reading, and bounding me to death to play chess with him. On our trip from Pluto he did none of these things. He kept to himself, spent most of his time napping or just staring at nothing, and seldom spoke except to answer me.

"And now he plans to retire and make a few gadgets he has in mind. What are they? We have never had any secrets before! He wants to keep it secret that there are intelligent beings of some kind on Pluto. Why? Why all these changes in character of a man I have known for years? Why his secrecy? Why the polite hints that after this trip I was to go my own way and let him go his alone?"

"I think he should be watched carefully all the time," he went on. "My theory is that he is now a robot instrument of the Plutonians. They plan to conquer the earth. If that's correct, then Gar will set up a laboratory to make more robots, or make robots out of men. And he will build machines to rule the world with."

He laid down the microphone and sat up. Mr. Foster looked back over his notes for a few minutes in silence.

"He didn't make anything on the ship or bring anything with him from Pluto did he?" he finally asked.

"No," Turlough replied. "Unless it was so small he could conceal it in his clothing. Anyway, he was still the old Gar when I picked him up and blasted off, except for the strange dream he had had in the aliflock on Pluto."

"Well," Mr. Foster said, rising to his feet, "We will keep a constant watch on him and examine everything he buys in the way of materials. He won't be able to build anything that will be a threat to us. Meanwhile, keep in touch with me. Just call the

number on that card I gave you and ask for me."

"O. K.," Turlough answered. The two men shook hands gravely and parted.

GAR WAS worried, and whenever he was worried he found something to keep him busy. Two days out from Earth he had relaxed in his bunk, closed his eyes, and left his body to itself, while he concentrated all his mental faculties on mastery of his dozens of robots in Bubble City, confident that when the alarm clock went off he would be able to regain awareness through his old body as usual.

Yet after several hours when he tried to contact his old body he couldn't get the slightest response. Immediately he had sent one of his robots out to get the robot of the stranger, the "Gar Hogan" who seemed to have no name of his own.

They met on the roadway again, and Gar burst out with the information that he had lost contact with his body on the ship.

"That's too bad," the stranger sympathized. "But there is nothing we can do about it now. If Turlough senses the nature of the trouble he may turn back. If he doesn't, your body will go on living, but without any guiding intelligence it may run into trouble."

"What'll I do?" asked Gar frantically.

"Just forget about it," the stranger advised. "You are here. You have millions of years ahead of you. You will soon forget about your earth body."

"I don't want to forget about it," Gar cried. "Don't you realize that without my earth body I don't give a damn about all this?"

"But there is nothing you can do about it," the stranger spoke sadly.

"I'll go mad," Gar said wildly. "I don't want to spend a million years playing with grotesque bodies like a child with paper dolls."

"I'll make you a promise," the stranger said sympathetically. "We will try to re-establish contact with your body. If we can't, in not over a year you will see Earth again in a body that looks and acts exactly like your original one. We will help you build a ship, under your direction, to take it to Earth. Will that satisfy you?"

"I guess it'll have to," Gar answered despondently.

The stranger looked at him speculatively for a moment and then turned around and went back to his own building.

Gar watched him go, and then did the same, feeling like a turtle drawing its head into its shell.

Back in his building again he built a worm body a city block long with two thousand legs. All he had to do was think of the details and his robot machinery turned it out. When it was finished he started out on a journey of exploration of the bubble, gliding along on the roadways, swinging over the edge and dropping to lower roadways.

After one got used to it the city was monotonous in its regularity. The buildings were evenly spaced, and all of the same architecture. They were all tied together by the networks of suspended roadways at every fifty foot level, from the bottom of the bubble to the top; and the foundations of each building were as solidly imbedded in the native rock at the top as at the bottom, so that the entire bubble was more or less an architectural and structural unit.

GAR, IN his bizarre robot body, was left strictly alone. Although he passed hundreds of robots they passed him without pausing. Even when he finally spoke to one he was ignored. In a fit of anger he pushed the robot he had spoken to over the edge of the roadway and watched it turn slowly over and over as it dropped to the bottom of the bubble.

He fully expected this act to bring out some sort of response from the impassive minds of the city; but so far as he could see, no one paid the slightest attention to his warlike act.

He followed a group of robots in an attempt to learn what there was to do around the city. They wandered ant like from level to level, apparently having no definite purpose in their wanderings.

At last he gave up in disgust and returned to his own building. "It's like being the last guest at a summer resort after the first snowfall," he muttered to himself.

Turlogh caught a taxi into Denver after watching the secret service man's jet plane disappear toward the east. He and Gar were part owners of the Stratford Hotel, and kept one suite of rooms for themselves.

Turlogh stopped at the desk and asked if Gar had come in yet. The clerk said he had gone up half an hour before, so Turlogh stepped into the waiting elevator and rode to the fifth floor.

The door to the apartment was unlocked. Turlogh pushed it open and walked in. Gar was sitting at the desk phoning.

His side of the conversation was noncommittal, consisting mostly of "I see's" and "O.K.'s." With a last "O.K." he hung up.

"Get through all the red tape?" he asked.

"Yeah," Turlogh grunted.

There was a discreet knock at the door, and Gar rose to let in the boy with a tray and several newspapers.

"Want some?" asked Gsr.

"I'll have a pot of coffee," Turlogh said, picking up one of the newspapers. He retired to a window corner and left Gar to himself. Gar began his meal with perfect composure, as if Turlogh ignoring him were the most natural thing in the world.

He finished his meal just as the boy returned with Turlogh's coffee. With a muttered, "Guess I'll go out for awhile," he followed the boy out into the hall, closing the door without a backward glance.

Turlogh stepped hastily to the phone and dialed a number the secret service man had given him. Almost at once the other end answered. Turlogh told them that Gar had just left the room and was probably in the lobby by now. Then he hung up.

It was shortly after that that Gar disappeared. Turlogh was told all about it that evening. Gar had been followed from the hotel. He went directly to a luggage store where he bought a small suitcase. From there he went directly to the First National Bank to the safety deposit vault. When Turlogh heard of this he felt sick. He and Gar kept a cash fund of over twenty million dollars in their safety deposit box.

From the bank he had gone to the surgical supply house in the medical and dental building, leaving there with a package which inquiry later on disclosed to have contained most of the instruments necessary for a brain surgery.

WHEN he left the surgical supply company he hopped into a cruising cab, and was out of sight before the secret service man following him could get one. He noted the num-

ber of the cab, though, and found out later that it had taken Gar to a downtown corner. He had paid his fare and vanished in the crowd of afternoon shoppers. There the trail vanished.

An emergency dragnet was put around the city, but Gsr had had over two hours to pick up a car and leave before every car was being stopped. The Denver police were called in to help. Every car dealer in the city was shown Gar's picture before the day was over, but none of them had seen him.

The picture was run on the front page of the morning paper with a five hundred dollar reward for information of any kind.

Turlogh went with the secret service man to the bank the next morning and opened the deposit box. It was empty.

"Do you have any record of the numbers of the bills?" asked Fred Ginther, the secret service man.

"No," Turlogh replied. "We kept that money as a sort of emergency fund."

"I see," Fred Ginther said dryly. "That accounts for almost two percent of all the money that has been kept out of circulation for the past ten years."

"You never know when you'll need large sums of money in a hurry. That's why we kept it," Turlogh replied uncomfortably.

Two weeks went by. Then one day Gar was picked up in the loop in Chicago. He was picked up because he didn't know who he was or where he was, and because he was standing in the middle of the street looking around blankly at the stalled cars.

The traffic cop led him to the curb and called the wagon. At police headquarters he was unable to answer any question rationally.

Only then did the police look into it more closely and find that they had picked up Gar Nichols. They sent a wire to the Denver police who had put out the reward notice.

Turlogh and Fred Ginther caught the next plane to Chicago. When they entered the room where Gar was being detained he was sitting on a bench, staring blankly across the room at the opposite wall. He turned his head at their entrance, but showed no sign of recognition when he looked at Turlogh.

"This him?" Fred asked tersely.

Turlogh nodded wordlessly. Then he turned and left the room. Fred asked Gar a few questions. Getting no response he followed Turlogh who was at the desk asking questions.

Gar had had no suitcase on him when picked up. There were no papers in his pocket of any kind. He had on the clothes he left Denver in. That was all.

"What do you think has happened," Fred asked Turlogh.

"I hate to say what I think has happened," Turlogh replied. "I think you'd better get your boss here."

Fred lifted the nearest phone from its cradle and asked for long distance.

Turlogh was pacing angrily up and down in his hotel room on the twenty-third floor of the Palmer house. Fred Ginther and the skinny man were slouched calmly in the two arm-chairs the hotel provided each tenant.

"Take it easy, Turlogh," Fred said soothingly.

"Take it easy!" Turlogh exclaimed. "We've got to go back to Pluto and drop a couple of bombs on that bubble before something happens so we can't."

"What can happen?" the skinny man asked.

"What can happen?" Turlogh

echoed. "Why, lots can happen. Don't you see what's happened already?"

"Sure. Your partner has lost his memory. You say that these things in the bubble on Pluto operated on him and took over." The skinny man paused speculatively. "Let's assume that's the case. Then one of the things was here on earth. He evidently lost control or else gave it up as a bad job after finding our civilization much bigger than he had thought. What could he do as one man that would threaten the whole world?"

"It's perfectly obvious what he did. He got those surgical instruments didn't he?" Turlogh exclaimed.

"So what?" Fred Ginther said.

"That thing that was controlling Gar's body operated on somebody else to make a robot out of him." Turlogh emphasized each word. "Right now somebody we don't know and have no way of finding out is a robot body of these things on Pluto. If it were friendly it wouldn't resort to such means and take such pains to cover up. And don't forget, THOSE THINGS ARE MILLIONS OF YEARS OLD. Our science is puny compared to what they probably know. If we don't destroy them right away it may be too late."

THE PHONE rang. The skinny man picked it up and said, "Foster speaking." He listened for a minute and then hung up. His eyes held a thoughtful look as he absently dropped the phone in its cradle.

"You may be right at that," he finally murmured. "An x-ray shows a small metal object of complex outline at the base of Gar's skull, imbedded in the brain."

"Is the brain all there?" asked Turlogh hastily.

"No," Mr. Foster said slowly. "The frontal lobe is missing. The space it

should occupy is filled with a paraffin substance. Also a few cubic centimeters of the back part of the brain is out, where that metal object is located."

He stared moodily at the carpet for several minutes. Then he gave a disgruntled snort. "At any rate," he said, "We can no longer doubt your story, no matter how unbelievable it sounds."

"What are we going to do?" asked Turlogh.

"It looks like we'll have to make a few atom bombs, but that'll take time. At least a month. Meanwhile we'll alert the whole police system, both local and government."

He pulled out a cigar and bit the end off savagely. "We have the best electronic experts in the world on the way to Chicago now. They're going to examine that gadget in your partner's skull to see if they can find out what it is. And the best surgeons in the country are going to examine that—," He hesitated for a word. "That brain-ectomy to see how it was done and how much skill it took."

He pointed his cigar at Turlogh. "You're going to have to be ready to lead an expedition to Pluto and show them where this Bubble City is."

"What about Gar?" asked Turlogh.

"His body will probably die under the examination he will be given. If not, and his brain is on Pluto, I doubt if the Plutonians will talk enough sense to enable us to risk saving him. For my money he's a goner." Mr. Foster saw the look on Turlogh's face and added, "I'm sorry."

Turlogh pulled himself together with a visible effort and shrugged his shoulders resignedly. "Well," he remarked, "Gar and I long ago talked it over and decided that if the time ever

came when it was a choice between the safety of the earth and our own lives, the earth would come first."

He watched mutely as the two government men closed the door behind them. Then he called the airport to make reservations for the next plane back to Denver.

FOSTER quietly went to work when he got back to Washington, D. C. Even before he arrived he was busy getting things started via the plane's radio.

He had the report on the gadget in Gar's skull, and the experts' opinions on where the materials for more of the things could be bought. It was quite likely that Gar had brought several of those things concealed in his clothing, so that he would not have to depend on the resources of the Earth for more of them.

But investigation of everyone who had bought such materials in the past few days, and continued investigation of all who could buy them in the next few months would have to be made.

In addition there was the movements of Gar as he made his way from Denver to Chicago. They would have to be tracked down. He could have gone anywhere in the world on the way. His picture would have to be broadcast to every police station in the country and millions of officers would have to conduct almost a house to house inquiry. Many millions of people would look blankly at that picture and shake their heads and mutter, "No, I've never seen that guy before, or—wait a minute. No. No, that couldn't have been him."

It was almost a hopeless search. If they found any robots they could make sure by an x-ray. But by now there might be hundreds of them. It

was entirely possible that the President might become a robot instrument of these beings on Pluto! His own men! Maybe even he might be made a robot. Foster shuddered at the thought. No one would know the difference.

The whole picture of a race of sinister, diabolical intelligences, squatting in a hole on a planet millions of miles away while they quietly and patiently took over the Earth by a means that would be almost impossible to stop, was terrible to contemplate.

The ONLY answer was to get at the core of the danger. Wipe them out! And he couldn't start the manufacture of atom bombs with just a phone call. Even the President couldn't start it. There would have to be a meeting of the world powers. All the evidence would have to be presented to them. There would be one or two stupid representatives who would suspect this as a subtle plan of the United States to get permission to make atom bombs so they could conquer the world! These men would have to be treated politely and their stupid arguments listened to while the whole planet was being threatened.

It could be that by the time the bombs were made the creatures on Pluto would be entrenched so strongly that they could prevent the take-off of ships with atom bombs to Pluto! It would be impossible to subject every key figure in the world to daily x-rays to determine whether he had been made a robot or not.

Foster sighed wearily and wished that space travel had never come. The human race was just asking for trouble and had finally got it.

When the wheels of his plane touched the landing strip at the capitol he impatiently loosened the crash

belt and was dropping off the wing of the plane almost before it came to a stop. A car was waiting to take him directly to the President. He had raced ahead for the appointment so that not a minute would be lost.

And as he sank back in the rear seat of the car, he felt of the gun in the armpit holster under his coat. From now on he would not be able to trust anybody. At the least hint of danger he would have to shoot to kill. Even if the danger came from one of his own men!

GAR MOVED several of his robots to every side of his building so that he could keep an eye, or rather, a dozen eyes, on whatever might go on in Bubble City, and did some heavy thinking.

"There are two ways to look at this thing," he thought to himself. "Either Bubble City is so old that time means nothing, and every creature here spends most of his time doing nothing, or something is going on that probably smells."

Whatever might be going on, Gar decided he had better improve his position somewhat. He thought of a body exactly like his own as it had been, and willed it to be made. The machinery which occupied a good part of his building turned it out in a few hours.

Then he strutted around, feeling his old self again, while he watched himself through the eyes of his robot units. The novelty of seeing from many different positions at once had worn off. The marvel of the adaptability of the brain would never fade. His brain now had over two hundred independent visual centers which could work without interference with one another, or co-ordinate into a solid image in his mind when their visual ranges overlapped. He

could do one thing with one body and another with another body, just as a man can read a book while walking, his legs doing work entirely unrelated to the work his eyes and hands are concentrated on.

Next he took one of his robots apart. It seemed to be made mostly of some sort of a plastic. The muscular system was interesting, but what he was most concerned with was the visual unit and the power unit.

The visual unit was complete by itself as he found out by taking it out of the robot and laying it on a bench, and still being able to see through the eyes.

The power unit worked something like the human heart, and was probably atom powered, since there seemed no source of power present. In the robots it pumped some fluid that probably was an alcohol, which powered the muscular system.

When taken out of the robot the fluid pumped out of it. Then the heart's rhythm increased until it shot a steady stream of air out of its exhaust port. It weighed perhaps three or four ounces.

The whole plan of the robot factory connected to his brain became clear. With most of the essential features of the robot bodies standardized, only the shape of a new robot, and the numbers of appendages would be variables in a new robot. The rest was standard just like the parts of machinery on earth.

Gar wanted weapons of some sort. None of the parts of the robot looked promising, but they were all he had to work with. So he went to work.

In three days he had a thing about the size of a football that could move through the air, hover, turn, all at his mental command; that had eyes, ears, and a sharp heavy nose. It was powered by two robot hearts that sucked

in the air in front and shot it out to the rear. Fins like those on fish did the steering.

As soon as he had perfected what he wanted he set his machinery to work and for the next few days it hummed steadily until he had thousands of his football robots stacked on the floors of the building.

Then he went on a real trip of exploration in half a dozen of them. None of the residents of Bubble City seemed to notice the small, oblong balls that glided among the buildings, so he explored everywhere, inside of the other buildings, and even the wall of the bubble.

Finally he stumbled across the tunnel at the bottom of the bubble. It was a smooth bore dropping at an angle of almost thirty degrees, perfectly straight as far as the eye could penetrate.

He sent the seeing eye balls, as he called them, speeding through the tunnel about a block apart. For hours they sped along. Finally, although there had been no change in the direction of the tube, it seemed to be going upward.

Gar puzzled over this and finally figured it out. On earth, for example, if a tube could be bored from San Francisco to London in a perfectly straight line, a person entering it at San Francisco would coast downhill until he was half way through. The last half, beginning miles below the surface, would be all uphill. If the trip used up no energy in friction he would coast to a stop just at the surface in London.

"So this bore goes to one of the other warm areas!" Gar exclaimed to himself.

HIS DEDUCTION proved to be right. As the foremost ball reached the opening to the next bub-

ble its eyes took in a sight even more awe inspiring than the first view of Bubble City itself.

There were no buildings here. It was a huge workshop. Thousands of atom powered motor generators were lined up on steps carved in the bottom half of the bubble. Thick copper bars led along these rows of generators, their ends leading finally to a gigantic unit in the center.

A floor that covered acres was crowded with huge cranes and machines, and an assembly line had been formed, on which rested over a hundred space ships partly completed.

Sub assembly lines were all over the place. Gar recognized many of the parts being made. What should he do?

He decided just to watch for the present. Up near the roof of the Bubble the wall seemed smooth. From vantage points up there he could take in all that went on below. He shot his floating balls out of the tunnel and upward. Then he backed them against the bubble roof where they stayed, held by the suction of the robot heart through its stern intake.

From half a dozen vantage points he studied what was going on. The huge thing in the middle of the floor of the cavern was an atom smasher. Through an opening on one side a thin but steady trickle of molten metal cascaded into a box of ingot molds. When one section filled, the box moved until the stream fell into the next mold.

No doubt by changing the raw material they could produce any element they had need for.

Where did the source of power come from? All this activity could not be the result of perpetual motion. There were millions of horse-

power of energy flowing in the activity below. There must be some source of radioactive elements to provide such vast quantities of power.

Gar noticed that here and there were openings that led below the floor of the bubble. He determined to get below and see what there was. Over on one side of the floor there was a storage area where no one seemed to be moving.

He cut one of his seeing eyes loose from its position on the cavern roof and sailed toward this area. As he drew closer he saw that it was covered with piles of grey ingots of some kind of metal. He stopped and looked at one closely. The oxide coating on it was quite thick, indication that the ingots had probably lain untouched for a long time.

He wished he could pick one up, and regretted that he had not put small arms and hands on these floating robots so that he could get a sample of these ingots.

A hole gaped in the floor between two rows of ingots. He sank cautiously through it, ready to draw back at the first sign of movement below.

Underneath were more piles of the grey ingots. He floated cautiously along a corridor formed by two tiers of the ingots until he reached an open area.

Here he paused, looking around. Squat, muscular robots were monotonously picking up the ingots and sliding them through openings in a thing that looked like a gigantic furnace.

On the opposite side of the machine things that looked for all the world like bombs were emerging, and being carted to an elevator that led to the floor above. Atom bombs? The shape of the things indicated they were designed to drop through the atmos-

phere. The tail fins were shaped to produce a spin.

And the ships being built up above, coupled with these bombs, could spell only one word,—war against Earth!

Gar knew the ban against atom bombs on Earth. He knew that even if Turlogh knew the truth about what had been taking place in Pluto he would not be able to convince the United Nations that they should get ready for an interplanetary war. And if the war were carried to Earth itself it would mean the end.

What were the Plutonians planning? Extermination of the Earthlings to keep any more from coming? Or conquest to enslave the race and rule the planet?

It didn't make much difference in the long run. From the number of bombs being turned out, the Earth would be blown to bits.

"I've got to stop this," he thought to himself. "I can't contact Earth. Or can I?"

The ships under construction up above! If he could steal one of those he might be able to get to Earth in time to warn them.

He let the floating ball come to rest on one of the piles of ingots, so that he could keep watching the production of the bombs, and concentrate his thoughts on the problem of bringing a robot into this bubble that could run a space ship. A floating robot with arms and legs might do the trick.

THE MAN stood in semi darkness staring at a white panel. Whenever he puffed on the cigarette hanging from his slack lips the flame at its end sent highlights of shadow over his features.

His eyes remained fixed on the white panel, and across it bobbed

skulls complete with necks and part of the rib sections.

The man chuckled mirthlessly as one skull paused, its jaw moving up and down with a regular rhythm, then bobbed on until it disappeared to the right of the panel.

The next skull to enter the panel from the left had a strange dark area at the base of the skull. The man with the cigarette hastily pressed a button under his finger.

A loud voice suddenly began to shout somewhere. The sound entered the place where the man with the cigarette stood, but it was too muffled to make out words. The tone, however, was angry.

He grinned, but his eyes beld a sick look. This was the third.

Near the other side of the panel several pairs of eyes also beld a sick look. The eyes belonged to international police officers. And their hands beld snub nosed automatics trained on the distinguished figure of Aaron Comstock, Canadian representative to the United Nations Court.

Mr. Comstock's naturally florid countenance was almost livid, and a steady stream of unquotable language was spilling from his thin lips, his hooked nose accenting the words by stabbing violently in whatever direction his head happened to point.

It pointed mostly at the two tight lippeo men who were wrestling with his arms, trying to pin his wrists together with a pair of handcuffs. They finally succeeded in their efforts, and the distinguished Aran Comstock was led through a door into a side room. A representative from the Soviet Union and one from France were seated on chairs against the wall, handcuffs adorning their wrists also.

In the middle of the room Foster was standing, nervously puffing on a black cigar, and gazing at the hand-

cuffed men. Several men in the uniform of the international police stood about. Service automatics were prominently displayed on their left hips in shiny, brown leather holsters.

Behind a walnut desk at the far end of the room sat a heavy featured man, his short arms resting on the desk top. This was I.P. chief, Vladimir Dubrovski. His small eyes stared blankly across the room. His whole demeanor was that of a man patiently waiting.

"Five votes can kill the bill requesting permission to make atom bombs," Foster said suddenly. "There should be at least two more."

Dubrovski grunted, but said nothing.

During the next ten minutes three more figures were led into the room, handcuffed arms held by grim, uniformed men.

There were now sixty-seven robotized humans under custody altogether. The decision of the world court would without a doubt be in favor of making the bombs. There were plenty of space ships to carry them. But every day the personnel connected with every phase of the projected attack against pluto would have to be viewed through a fluoroscope, and the guards themselves would also have to be examined.

The thing that was going on was too insidious. One of Foster's own men had left the headquarters building in Washington to go to the capitol building. He had arrived only ten minutes later than he should have. The fluoroscope showed the metal gadget at the base of his brain.

Attempts to remove the things by surgery had so far proven fatal. The attempt had only been made twice. And there just weren't enough fluoroscopes to do a complete job of surveillance. They were being taken by

court order wherever they could be found, and factories were turning them out as fast as they could be made; but an unknown number of robotized humans were undoubtedly running around loose. Enough to be a real threat. And no doubt their numbers were growing steadily.

Experts were working on the two gadgets taken from their unfortunate victims. So far they had not been able to learn the least thing about them.

FOSTER GLANCED at his watch. Two o'clock. The meeting would be starting. The desk phone rang. Dubrovski lifted it from its cradle and grunted. He listened for a few seconds and hung up. His small eyes held a humorous glint as his thick voice slurred out the words. "Quick work. They granted permission in twenty seconds by the stop watch of one of the reporters."

More developments came in later. The materials for the bombs were already stockpiled in various countries. Each nation would make its quota of bombs and load its own space ships. Guns from the international patrol fleet would be transferred to the space ships in the various factories under international surveillance. Once the work started it would only be a matter of a few days until the fleet could take off.

* * *

Turlogh gazed anxiously at the unconscious figure of Gar strapped to the bunk in his space ship. A middle aged doctor stood beside him.

"You think he'll be all right?" Turlogh asked.

"As right as he can be under the circumstances," the doctor reassured him. "It was Foster's idea to drug him and take him along. As soon as the drug wears off now we'll see how he is. You say he was rational and

himself up to two days before you landed on Earth?"

"He seemed to be," Turlogh answered. He turned suddenly and went forward to the pilot room. Gazing through the side viewports he watched the rest of the fleet. The long, silver ships seemed to hang motionless in space. Rocket gasses shot from their stern tubes and vanished almost instantly behind them. Now and then a quick puff at the side of one of the ships would indicate the action of the steering rockets, correcting the course of a ship. Another day of the acceleration and their orbit for Pluto would be made. Then only the steering rockets would indicate that the fleet was anything more than a V shaped formation of asteroids.

Turlogh relaxed the grim compression of his lips and lit a cigarette. He was more used to the long days of inactivity of space travel than the international police pilot at the controls. Years among the asteroids had given him the patience that only an interstellar traveller can attain.

Puffing contentedly on the cigarette, Turlogh looked through the eye piece of the ship telescope, changing its direction constantly and pressing studs that dropped or lifted filters that cut down the excessive light until the sky looked something like it did on earth where the miles of atmosphere absorbed part of the rays.

His body swayed slightly as the automatic radar devices detected some small object ahead, plotted its course and altered the course of the ship just enough to avoid a collision. It swayed again as the course corrected itself, the object having flashed past too quickly for the eye to see.

The days wore on. The fleet passed the orbit of Mars before Gar regained consciousness. His mind was still a

blank, but it might be possible that the alien beings on Pluto were passively spying through Gar's blankly staring eyes, and listening through his apparently deaf ears; so he was kept confined to his bunk, his wrists fastened to the bed with steel chains.

Turlogh spent most of his time at the telescope, peering ahead. Pluto became large enough to see. Imperceptibly it grew larger until it was a fair sized disc in the telescope.

GAR SET TO work designing a floating robot with arms and legs. After it was finished it would take hours to send it through the tunnel to the other bubble and it might be detected and all his careful spying brought to an immature end. If this happened he had his thousands of floating halls with hard noses kept in reserve. He would use these to do as much damage as he could.

What the Bubble City residents had in the way of counter measures he couldn't even begin to guess. The only one that he and Turlogh had ever talked with mentioned a period when they had fought over possession of the robots. No mention had been made of the kind of warfare they had engaged in, so there was no clue as to what they might do; or could do.

If he could get a few floating robots into the other bubble that could pick up things he could at least short out their banks of generators and perhaps burn up a few of them.

If he could wreck all their space ships except one, and get that for himself, he could force these beings to some sort of terms or destroy them, himself included.

Through the eyes of the floating balls in the other bubble he watched the progress of the work of making the space ships. A lull in the work on several of them enabled him to slip

aboard and conceal himself; in the shape of one of his seeing eye foot-halls over the instrument panel in the pilot room.

It amazed him how nearly like the ship he and Turlogh had come to Pluto in, these ships were. They might have been turned out by the same company back on Earth!

Finally the floating robot with arms and legs was finished. Gar sent it ahead at the same time putting his automatic machinery to work making dozens more of them. Powered with three hearts it shot into the tunnel and gained in speed until the cold light bulbs, spaced about fifty feet apart, became a blurred line of light.

It passed a long line of human shaped robots marching in single file through the tunnel. These were evidently to be the pilots of the ships! And surely they must have seen and heard him as he passed so closely over their heads. But if they did they gave no sign of it; and as the end of the tunnel came, and the eyes of this new robot sent to his brain the scene of activity and preparation for war, there was still no sign that any of the alien creatures whose brains rested in the tall, reed-like buildings in the other bubble were aware that he knew of their schemes.

Evidently they were quite human in that they could not see something they didn't expect. They had no robots that could sail through the air. They never looked up. And they seemed to be serenely ignoring him, thinking that since he had no more than they to work with he could be no threat to their plans.

Gar mentally shrugged his now almost forgotten shoulders. Perhaps he could be no threat to them. Perhaps they knew of everything he didn't just as people idly watch the antics of a kitten which grimly at-

tacks a shoe, determined to bring the wearer of the shoe to the floor and claw him to bits. And perhaps they were just as amused at the things he was doing.

If that were the case,—what difference did it make, so long as he could be free to put in the last lick? If they were underestimating him it would be their hard luck!

BUT GAR had a hunch that these beings, so incredibly old that all their mental habits were firmly fixed, had one track minds in spite of their thousands of focal centers of consciousness. He felt that once they had decided he could do no harm they had dismissed him from their thoughts. And since they were many, each one who saw his floating robots probably thought they were the work of one of themselves!

One thing that gave him this feeling was the fact that they did not seem to think of themselves as individuals. The one they had talked with had always said "we", never "I."

And in his own brief experience he had found that the focus of consciousness set up in his mind to direct and be aware through a single robot had a tendency to isolate itself from the rest of his mind completely, and communicate with other parts of his mind almost as a separate individual. Perhaps in time such focal centers would become individual minds, all within a single brain, each with its own individuality and desires.

He chuckled to himself. Goodness knows that the mind of an ordinary human often struggles with itself, trying to reach decisions between opposing desires. Suppose each desire of the mind could be carried out by a separate body!

As a result of all this thinking, Gar decided to be a little bolder. He now had floating robots the size of footballs, with two short arms and two telescoping legs, being completed at the rate of one every twenty minutes. As soon as one was finished he took control of it and sent it speeding through the tunnel to the other hubble. And as each one emerged at the other end it sped openly to one of the space ships and concealed itself above the instrument panel.

He even sent one into the ship that already had an armless and legless robot, and, since the ship was vacant at that moment, he greeted himself warmly.

"Hello, short, squat and ugly," he said with gay contempt through the new robot to the old one.

"Hello yourself," came from the seeing eye football. "I think you're cute with your football body, pointed nose, eyes and mouth like a goldfish, and arms and legs not much bigger around than straws in a soda fountain. I think if you ever get to Earth you could get a contract with the Disney Studios."

"Thank you," came the reply.

A moment later the pilot entered, followed by several robot mechanics. Then the ship began to move.

From his vantage points through the floating halls at the top of the hubble Gar watched the ships move slowly and one after another vanish into an opening in a side wall. Each ship had been huilt on a wheeled truck which could carry it to the surface for the takeoff.

The bore of this tunnel sloped upward at an angle of about ten degrees. At the top was a long airlock, freshly made, through which the ships passed, one at a time. On the outer surface of the planet the ships moved down a long roadway for a half a mile, then

made a right angle turn and blasted off.

While this was going on Gar was in a mental quandary. He might have tried to gum up the works by taking over the first ship to enter the tunnel and somehow causing one of the bombs to explode, sealing the hubble. This might only have delayed the takeoff of the others. He might now take over one of the ships and bomb both hubbles, and if he succeeded he could destroy the Plutonian race completely.

Or he might take over all the ships at once and control the fleet. BUT, COULD THE PLUTONIANS BLOCK OUT HIS CONTROL AND SUBSTITUTE THEIR OWN IN HIS ROBOTS? On the answer to that question hinged the success of anything he might try to do. AND HE DID NOT DARE TO TAKE THAT RISK. Whatever he did must be final and irrevocable, and done without warning, so that any last minute attempts by the Plutonians to nullify his work would be impossible under any circumstances.

PLUTO HAD increased in size in the telescope until it was as large as the moon is to the naked eye on Earth when Turlogh saw the Plutonian ships take off. He radioed the commander of the fleet only to find that every ship was watching that takeoff.

But Turlogh could give information the other observers could not. He informed the commander that the ships were taking off from the second largest warm area on Pluto, while the Bubble City was under the largest of the three warm areas.

"Then no doubt both warm areas cover bubble cities," was the commander's conclusion.

"Perhaps the third one does, too,"

Turlogh added.

"Thank God we brought plenty of bombs," the commander said before signing off.

One after another of the sleek ships turned lazily on its axis and then spit gasses out of its stern tubes, to vanish in the distance. In two hours the ships were in battle formation, each a hundred miles from its nearest neighbor. Then, at a command from the flagship, the automatic fire switch on each ship was unlocked and pushed home.

Now anything that approached to within a hundred miles of any ship would be detected by the radar that ordinarily served merely to avoid collision with other objects. Its course would be plotted automatically just as before, but a small explosive bullet fired from one of the many guns, aimed automatically, would intercept the path of the object and hit it.

It was for that reason that each ship had to move out of the range of the others, and it was for that reason that the automatic fire switch was kept under lock, for if the switch were closed while the fleet was in close formation it might mean the end of the fleet. Each of the other ships would be detected and fired upon within six seconds after the switch was closed!

Such was the strength of the Earth fleet. Could the Plutonian fleet match it?

The commander in his flagship asked Turlogh that question over the radio.

"I don't know," answered Turlogh. "I only saw Bubble City, not the other place. There was no way that I could see that space ships could come from Bubble City. For all I know these Plutonians are old hands at space travel. If they are they probably have a few tricks up their sleeve that we

don't know anything about. If they learned all they know from Gar they should be a cinch, because he never did know the first thing about radar. For that matter I couldn't tell how to build a completely automatic fire control mechanism."

"But they might have other tricks up their sleeves?" the commander persisted.

"They might," Turlogh replied. "Don't forget these ships ahead will be manned by robots. Self preservation don't mean a thing to them. They may have robot torpedoes that can twist and turn on unpredictable paths; that can see where they're going and track us down. They undoubtedly can stand more acceleration than we can, and may be able to out maneuver us. In fact, they undoubtedly can! I would advise—," Turlogh hesitated.

"I see," the commander answered thoughtfully. "I realize your hesitancy, but the lives of all the men on just one ship are worth more than the live of a single man whose life is probably already forfeit."

"Yes, sir," Turlogh said dumbly.

At a radioed command the ships strung out and began a long arc out of the plane of the ecliptic to avoid the oncoming Plutonian fleet. The Plutonians guessed their maneuver and proved they were faster. Their ships spread out and went into a complex system of orbits around the planet which protected it nearly from any form of attack.

A bomb was launched experimentally by one of the earth ships. When it reached the vicinity of the Plutonian net one of their ships emitted a cloud of white smoke. A few seconds later the heavens were lit up fiercely by the blast of the bomb. It had exploded harmlessly at least eight hundred miles from the surface of Pluto.

Half hour later six ships detached themselves from the Earth fleet and dived toward Pluto in close Indian file, their fire switches opened so that they could hold close together.

Turlogh watched, tightlipped, knowing that the men, in the lead ship at least, were committing deliberate suicide. Perhaps all of them would die in a vain effort to destroy the Plutonians.

He watched through the telescope as the six ships drew closer to the network of enemy space ships. The fate of two worlds hung in the balance.

Someone tapped him on the shoulder. It was the doctor.

"Gar has regained consciousness," the doctor said. "He is asking for you."

WHILE THE space ships were taking off from Pluto, Gar, through the eyes of the "cute" little football robots with legs and arms, perched above the instrument panels in the pilot rooms of the ships, watched what went on. He guessed from the actions of the crews and the movements of the ships that the Earth fleet had arrived.

He knew enough about the theory of space battle to guess that there would be feints on each side before the actual battle begun. So, keeping one corner of his mind turned on the ships, he directed most of his efforts toward trying something he had never dared to try before; "taking over" a robot of one of the Bubble City beings by force of will.

He didn't know quite how to go about it, but he had been studying the problem with what he had to go on. He had no trouble with his own robots. There was some subconscious "key" to each robot, so that his mind would contact it or sever connections

with it at will.

"If I can isolate and bring to my conscious mind the factors that go into the problem of contacting a robot," he reasoned, "I should have it. It will be like a series of Yale locks, only instead of tumblers there will be thoughts. A series of thoughts that can take on a large number of combinations."

He thought this over and then went a step further. "If the thought necessary to contact any robot were mechanically induced by some external stimulus, and this stimulus were created by a thought, the whole thing would be simple. Each time a robot was turned out by my machinery, the key to contacting it would be hooked onto my brain, so that the association of the stimulus to the contact with the robot would be made automatically."

"Then," he exclaimed in triumph, "unless the series of keys in my make-up were known to the others they could not take over my robots or prevent me from holding my contact with them!"

He had another brilliant inspiration. Through the hundreds of football robots he had in reserve he began to search his building. In ten minutes he had located a room that held what he was looking for. Row upon row of small glass tubes were held in racks.

From each tube two fine wires led to a heavy conduit that went through the wall. The floating robot drifted along down the row. At the far end was a tube with its two fine wires broken! While the robot was looking along the row Gar had started a robot with flexible, delicate fingers toward the room. When it entered he lost no time in reconnecting the wires.

A thrill of exultation flashed through his brain. He was looking at

the familiar hands of his earth body. They were held in chains, but no matter. They were HIS. He lifted his eyes and saw a man he had never seen before. A thousand familiar feelings were crowding into his consciousness. He knew he was on a space ship. He looked carefully at the room and recognized a scratch on the frame of the hatchway. It was HIS ship.

The strange man was looking at him intently and his eyes held a look of fascination and fear.

"Is Turlogh on the ship?" Gar asked.

At the man's mute nod he said, "Get him. Get him at once. There's not a minute to lose."

THE MAN turned and fled from the room. A few seconds later Turlogh dashed through the opening. He took one look at Gar and saw the light of intelligence in his eyes. Then he exclaimed, "Gar! Is it really YOU?"

"Yes," Gar replied. "Forget the homecoming and tell me just what is happening now."

Turlogh told him in a few clipped sentences. He told him of the robotized humans on Earth, also, and started to tell him the details of the events leading up to the takeoff of the fleet when Gar stopped him.

"There's no time for that now," he said. "I've got to act fast." He lay back on the bunk to which he was chained and appeared to go to sleep. Turlogh spoke to him once and got no answer, so he sat down and waited. After a minute he stood up again and went back to the control room telescope to watch the drama going on.

The string of earth ships was now within a few hundred miles of the range of the Plutonian ships. The telescope brought them up so that they seemed only a few city blocks distant.

A steering rocket on one of the Plutonian ships suddenly shot out hot gasses. The ship veered slightly. A ship to the right of it fired a shot.

The shot took the ship in the mid-section, throwing out an eye searing flash of light. The two halves of the ship rolled over crazily as they fell away from each other.

The next minute the string of Earth ships shot through the area that had been covered by the wrecked ship. Their crews took no chances. Each ship, as it made sure it was through the net, dumped its load. They had aimed their thrust at such a point that if they got through they could do just that; dump their loads and be reasonably sure that they would hit the two largest warm spots. Then if they didn't get back they would not have died in vain.

When the lead ship dropped its load its radio technician yelled into the microphone, "Hurrah for Patrick Henry!" It later turned out that he was r. t. 1-c Henry Wong, called Sing Song by his buddies.

Each ship, as it dropped its load, braked into an orbit only a few miles above the surface of Plute where the radar detectors from the enemy space ships could not pick them out easily.

The bombs, aggregating over six tons of the most efficient type of radioactive power, dropped lazily downward. They had split into two groups that separated farther and farther as they neared the planet.

A few minutes of careful measurement showed that they would make direct hits in the centers of the two largest warm areas, the largest would be hit in twenty-seven minutes, and the other in thirty-two.

Turlogh left the pilot room and went back to Gar. As he stepped through the doorway Gar looked up, a wan smile on his lips.

"Well, I did it," he said. His voice was calm. It sounded almost as if he welcomed what would come in less than half an hour.

"Yes," Turlogh's voice was vibrant with the hurt of the moment. He pulled two cigarettes out of a crumbled pack and stuck one in Gar's mouth. After he had lit both of them he sat on the edge of the bunk to which Gar was chained, wishing fervently that the keys to those chains were on board so that Gar could die a free man.

Both men were silent. Their eyes held a faraway look. Finally Gar said softly, "Remember that time in San Francisco, Turlogh?"

"Yeah," Turlogh answered gruffly. Then he grinned. "You never did tell me how you got your head stuck in the spittoon in the beer parlor."

GAR'S FACE turned red. "Believe it or not," he said, "I dropped a quarter in it and was trying to see where it was."

"Well I'll be damned," Turlogh murmured. "That's almost as bad as—" he stopped, his own face turning red.

"You mean the time you hid your money in a trash can in an alley so that no one could steal it from you while you were drunk, and then forgot which alley?" Gar asked.

"Yeah. Yeah." Turlogh grinned. "We were always a couple of dumb dodos. But I always thought I was the dumbest until now. Sticking your head in a spittoon to look for a quarter!" He snorted disgustedly.

"Well it wasn't just an ordinary quarter," Gar said. "I spent a lot of work on that one."

"Work?" Turlogh said. "What do you mean, work?"

"That quarter had two heads on it," Gar said with a knowing grin.

"Huh?" Turlogh exclaimed. A picture flashed into his mind of a quarter lying on a rubberized pavement by the side of a car in Bubble City, head side up, and Gar climbing out of the car to pick it up.

"Why you dirty—" He glared at Gar, then stopped. A muscle under his left eye twitched, and his jaw dropped downward in an agonized expression.

He wiped the expression off his face with the palm of his hand, leaving grief. A tear glistened in his eye as he turned his back on the figure of Gar, which lay quietly, its eyes staring blankly at the roof of the bunk.

At the door he turned and looked back. A pitying smile for that living body of a dead man softened his features. He muttered, "Son of a," as he left the room and went to the telescope.

He knew what he would see. And as he trained the telescope on what had been Bubble City he muttered softly to himself.

"What did you say, sir?" asked the officer who had relinquished the telescope to him.

"Huh?" asked Turlogh, taking his eye from the telescope to look at the officer. "Oh, I said, nuts."

"Oh," the officer said vaguely.

TURLOGH slopped beer on his shirt sleeve and on the bar as he angrily slapped his glass on the counter. "Go away," he said, "Don't bother me."

"Is your name Turlogh?" a feminine voice asked at his back.

"What's it to you," he growled. "Leave me alone."

"I ask you," she insisted, "Is your name Turlogh Hogan?"

"So what!" he said turning to face her.

"We have been looking for you for six months," she explained. "We want

to make an expedition to Pluto and we've got to have you along."

"What do you want to go to Pluto for?" Turlogh said. "There's nothing there. Gar's dead."

"Just the same," she answered, "the government is forming an expedition to go to Pluto to explore the third warm area, and we need you along because you're the only one who has been on the surface."

"What do you need me for? I've never been in the third warm area, and the other two are destroyed along with my old pal Gar. Leave me alone. All I want to do is drink and forget it."

The girl didn't answer but turned and nodded imperceptibly to two men standing near the doorway of the beer parlor. These two men stepped forward, one on each side of Turlogh and lifted him forcibly from the stool.

"I'm afraid you'll have to go whether you want to or not," she said with a note of finality in her voice.

Turlogh's protests did not avail him as the two men pushed him along out of the beer parlor. Outside they shoved him into a car and followed him in, to sit on either side of him. The girl climbed in the front seat by the driver. In fifteen minutes Turlogh was standing in front of the desk of Port Commander Jensen of the North American Space Port just outside of Denver.

"I absolutely refuse to take any part in an expedition to Pluto," Turlogh said forcibly. He drove his fist toward the surface of the desk intending to put emphasis on his remark. His fist missed the desk by a foot and his chin followed it to land with a resounding thump on the edge of the desk. The Port Commander and the girl smiled quietly while Turlogh regained his feet and a certain amount of drunken composure.

"Maybe you don't understand why we are making this expedition," Commander Jensen said smoothly. "We have evidence which leads us to believe that Gar may still be alive. That's the reason we're forming this expedition."

"Gar! Alive!" exclaimed Turlogh.

"Oh, it's by no means certain," Jensen said, "but we believe it's entirely possible that he may still be alive in spite of the explosion, and whether he is or not, until I can know what is underneath that third warm area, we can never feel safe about Pluto."

The thought that Gar might still be alive sobered Turlogh instantly.

"I'll go," he said.

The girl and the Port Commander looked at each other and sighed with relief. "OK, get sobered up and pack," Jensen said, his voice now full of business and crisp. "The ships leave in twenty-four hours. If you need any money say so now because you have to be ready in twenty-four hours."

TURLOGH left the Port Commander's office his mind full of hope and anticipation of once more being out in space. He signaled a taxi, and when it pulled to a stop at the curb he climbed in.

When he turned to close the door the girl was crowding in after him, a mischievous smile on her face.

"Hello," Turlogh exclaimed. "What are you tagging along for?"

"Just to make sure you don't go back to that beer parlor," she said.

"Oh," Turlogh grunted. He sat in silence while the taxi covered blocks. Occasionally his eyes stole in the direction of the girl. They turned stonily forward again when he saw that she was still watching him. Finally he said, "What's your name?"

"Frances Nichols," she said simply.

"Pleased to meetcha," Turlogh

grunted. Then he did a double take. "Are you any relation to Gar, my old partner?"

"I'm his baby sister," she said, the mischievous smile on her face again.

"Well I'll be damned," Turlogh said softly. "Gar never told me he had a sister. For that matter he never said anything about any of his folks. I guess maybe it was because I never asked him. Are you going along with us?"

"Yes," Frances replied. "As a matter of fact I'm the one who is responsible for this whole expedition. I can't believe that Gar is dead."

"What good would it do if he was still alive," Turlogh said hopelessly. "They've probably incinerated his body by now."

"No they haven't," Frances said eagerly. "It's still alive and we are taking it along on this expedition."

"Oh," Turlogh grunted.

"Well, I don't think it will be much use," he went on. "I don't see how he could have survived that atom blast and if he survived the blast I don't see how he could survive the vacuum cold of space in the months since then. But if you think he's still alive that's good enough for me."

Suddenly he held out his hand, a warm grin on his space tanned face. Frances took it and they shook hands solemnly.

TURLOGH stood looking through the forward view screen at the enlarged disc of Pluto. To the right and to the left as far as the eye could reach an occasional silver flash showed the position of the other ships of the fleet. Similar flashes showed above the surface of Pluto indicating that the compact net of Plutonian ships still circled the planet.

"How are you going to get through

those?" Turlogh asked the Captain who was intent on reports at his desk nearby.

"Our ships have picked up several thousand asteroids during the journey out here," he replied without looking up. "We are going to drop those in their screen and see if we can't exhaust their ammunition. At the same time we're going to try to bring a few of them down. Most of the fleet will remain out here. If we can get our ship and three or four others through their defense screen—that's all we want."

Turlogh's eyes again returned to the disc of Pluto and he watched it enlarge until it covered two-thirds of the forward screen.

Suddenly the right arm of the fleet phalanx began to move ahead. It swept majestically in a large circle in front of the rest of the fleet and from each of the ships several flashing objects broke loose to dive toward Pluto. They all reached the range of the Plutonian fleet's detectors at about the same time. The disc of Pluto lit up with thousands of flashes as the defense fleet went into action. Not a single asteroid of the thousands dropped by the earth fleet got through. No sooner had the right wing of the fleet resumed its position than the left wing followed through in the same kind of maneuver. Once more the Plutonian defense destroyed the barrage.

"What now?" Turlogh asked the Captain.

"Oh, that was just a feint," the Captain replied. "I wanted to see if their ships were still in working order without any directing intelligence to keep them going. To get through is really a matter of figuring out the mathematics of their defensive maneuvers."

Several hours later the warning

gong sounded and the ship Turlogh was on suddenly accelerated in a full power dive toward the surface of Pluto. Almost before the power dive had begun the ship was straightening out a few thousand feet above Pluto's surface and the landscape was beginning to show its mad flight across the view screen. They were through!

The landscape below sped by at the rate of 3,000 miles an hour. Bleak mountain crags were succeeded by black, bottomless abysses in rapid succession. The huge hole which had once been Bubble City loomed briefly and was left behind.

A few spurts from the steering rockets set the course of the ship toward the only remaining warm area. This area flashed by underneath the ship an hour later.

Then began the routine work of stabilizing the ship's orbit and feeding data to the landing robot which would set them safely on the surface when they once again circled the planet.

Turlogh remembered the strange dreams he had had that first time while his and Gar's ship circled the planet while they were surveying it. He wondered if there were any intelligences left in Bubble City which could reach out and probe their minds.

The ship lashed abruptly into the night side of the airless planet. A few moments later the Captain rose.

"Well," he explained, "there's nothing to do now but wait. Let's have a little something to eat, and then maybe we can have a bridge game afterwards if you feel like it.

TEN HOURS later, after an uneventful night, the ship ground to a stop and Turlogh unstrapped himself from his shock seat. He had to help Frances into her space suit.

She confessed excitedly that she had never been to any of the other planets before. Her aloofness at the beginning of the trip was disappearing rapidly.

By the time he and Frances were ready to leave the ship, several of the crew had passed through the airlock and could be seen standing in the frozen snow of solidified atmosphere that covered the surface outside.

"Is that really frozen air?" Frances asked excitedly. "Or is it just snow?"

"That's air," Turlogh said. "Before Bubble City was exploded, the dwellers used to send robots out to shovel it into cars where it was taken inside Bubble City to replenish their atmosphere. The sun is so far away from Pluto that even the full force of its rays isn't sufficient to melt the frozen atmosphere that covers most of its surface."

"Won't we freeze to death standing in it?" Frances asked.

"You won't even feel it," Turlogh replied. "Your suit has an automatic heating system which keeps its inner surface at just the right heat for you to be comfortable regardless of what it is outside."

The floated arm of Turlogh's suit motioned toward the airlock inviting Frances to precede him. She hung back.

"I—I'm scared," she said nervously.

"Go ahead," Turlogh replied, "There's nothing to be afraid of."

Soon they were standing on the surface outside with those of the crew who had gone out before. The Captain's voice sounded in Turlogh's ear phones.

"Would you have any idea," it said, "where we might find an entrance to this bubble?"

"No, I don't," Turlogh answered. "We'll just have to hunt around and see if we can find an entrance. There

should be several if this bubble is like the other two were. If we can't find an entrance we'll have to go to the other two bubbles and try to find an underground connection that leads to this one."

"We'd better all spread out and look then," the Captain's voice said.

"Everybody be careful," Turlogh warned. "The rock surface under this frozen snow is sharp and brittle. If you fall your suit is liable to be cut open on the sharp edges, and you all know what that means."

"Yes," the Captain's voice cut in. "I don't want any casualties through carelessness."

TWO HOURS later the bloated figures of the explorers dragged back toward the ship. One by one they advanced through the airlock until all were gathered once more inside the ship.

As each one discarded his suit he shook his head indicating that he had found nothing. As the last figure climbed in and reported his failure the Captain shrugged his shoulders resignedly.

"I guess we'll have to go to Bubble City and try to find a subterranean tunnel leading toward this section."

"Does that mean that we'll have to climb over mountains and travel on foot to Bubble City?" Frances asked.

"Certainly not," the Captain replied. "We'll just takeoff, establish an orbit, and go through the same process we did to land here, but land near Bubble City instead. Everyone to your station. We takeoff at once."

* * *

Turlogh sat on the edge of the gaping hole in Pluto that exposed what had once been Bubble City. His eyes swept downward taking in the wreckage of the reed-like skyscrapers that had once climbed thousands of feet

from the floor of the bubble to its ceiling.

These buildings were now broken and twisted, the roof of the bubble fallen. Huge boulders perched on the wreckage of the skyscrapers below.

Turlogh's eyes held a hopeless look. How could they find Gar in all that wreckage when every building had looked like every other building. Unless there were some way Gar's brain could communicate with them it would be a hopeless task. Gar's body in the space ship had shown no response,—no indication as to whether Gar still lived or not.

Frances crept up to stand silently by Turlogh and look with awe at the wreckage left by the atom bombs which had been dropped to destroy the threat to civilization embodied in those intelligent skyscrapers whose multifaceted minds could direct any number of robot creatures of all descriptions. The voice of the Captain sounded in Turlogh's earphones.

"Where can we get down into the bubble?" he asked.

"I'll show you," Turlogh said, turning.

He led the way to the doorway through which he and Gar had gone,—what seemed centuries ago. Inside things were just the way he had left them. Even the car still sat silently on the plastic road bed.

With Turlogh leading the way and Frances marching by his side the bloated figures in space suits walked down the spiraling incline which wound through solid rock to the bottom of the bubble.

When they came to the exit of the tunnel Turlogh pulled up in despair. The fragile roadway which had once spanned the gulf from the wall of the bubble to the nearest skyscraper was gone. Where it had been was only empty space which dropped

abruptly to the depths below.

The Captain strode forward and took in the situation at a glance.

"Is this the only entrance you know to the bubble?" he asked, turning to Turlogh.

"Yes," Turlogh answered, hopelessly.

"Well," the Captain replied, "that means we have to figure out some way to get down to the bottom from here."

Turlogh surveyed the wreckage that spread out below. The reed-like skyscrapers were jammed together like broken match sticks.

Looking through his powerful Army binoculars he studied detail after detail, hoping to find some evidence that life still existed in these ruins.

SUDDENLY a startled exclamation broke from his lips. His binoculars settled on one spot near the far edge of the bubble. He had seen a movement there. As he brought the spot into sharp focus he saw a strange creature which stood, statue-like, its head turned toward the party of earthmen.

Then, as if sensing it had been discovered, it turned and disappeared from sight behind a broken piece of masonry.

"Hey," Turlogh exclaimed, "I just saw something."

"What was it?" Frances asked.

"Did it move?" asked the Captain.

"I don't know what it was," Turlogh said. "It disappeared before I could take in its details, but it didn't look like any kind of animal I've ever seen before. Whatever it was it wasn't wearing a space suit, so it must have been a mechanical robot."

"That means we had better be careful," the Captain said. "If there is any kind of intelligence left in these ruins it will probably be out to get

revenge for what we did when we were here before."

He turned to his men and issued a few brief orders.

Two hours later the men returned from the ship with two portable space cannon and a winch. The cannon and winch were set up on the lip of the cliff and soon the winch was dropping space-suited figures to the floor of the bubble below.

"From here on you're the boss," the Captain said to Turlogh. "You know more of the layout of Bubble City and where we might find a tunnel leading to the third warm area than we do, and also, you know more of what we might be getting into. We'll follow your orders without question."

"I think what we better do first," Turlogh said, "is try to get through the wreckage to the spot where I saw that creature just now."

"That's a good idea," the Captain said, "let's go."

The floor of Bubble City was fairly free of wreckage. The buildings in falling had jammed tightly together far above the lower levels and formed a barrier which stopped the plunging rocks from the shattered top of the bubble. Here and there lay bits of smashed machinery and unearthly figures which had once been the mechanical robots controlled by the minds in the skyscrapers. Now they lay motionless where they had been when the atom bomb plunged through the roof of the bubble to destroy the civilization that had lain hidden there for millions of years.

Frances stayed close to Turlogh asking innumerable questions about everything they passed. A line of robot street sweepers stood untouched by the fallen debris which had miraculously missed them. A spider legged creature whose function could not be

determined from its appearance lay crumpled, a huge boulder having landed a direct hit. Here and there white tinges of frozen air covered the street and the objects they passed as they made their way slowly across the ruined city.

"The tunnel to the second bubble," Turlogh explained to the Captain, "left this bubble on the side that is in direct line with that bubble, so I think that we stand our best chance of finding a tunnel to the third bubble by going to the side of the city facing in that direction."

"That's the direction in which you saw the thing that vanished when we were standing up on the cliff, isn't it?" the Captain asked.

"Yea," Turlogh exclaimed, "I have a hunch he came from the third bubble."

"You say he didn't have a space suit on?" Frances asked.

"It didn't look like a space suit," Turlogh replied, "but with such fantastic creatures around it could just as well have been the space suit I saw with something unknown inside it."

AFTER TWO hours of slow trudging, the far wall of the bubble could be seen down the length of the street they were on. The Captain ordered the men to be on the alert. Electron guns were drawn and the men imperceptibly formed a protective circle around the Captain, Frances, and Turlogh.

Without warning, bodies began to rain down on the group, howling the men over before they could bring their electron guns into play. Turlogh rolled in his fall, landing on his feet in time to blast one of the creatures which swarmed among them.

As swiftly as they had come, the creatures bounded into the air and

vanished in the wreckage above.

To Turlogh's dazed ears came the cry of Frances calling for help. Desperately he looked around. Frances was gone!

A swift count showed that no one else was missing and no one had been hurt in the attack except the creature that Turlogh had shot. The swift, desperate attempt at pursuit ended in futility. There was no trace of the attackers nor sign of which way they had fled.

Turlogh and the Captain examined curiously the body of the strange creature. It was shaped something like a strange insect.

Its short, squat body was held up by eight, pipe-stem legs, the rear four of which were much longer than the front four, evidently for the purposes of jumping.

At the front end of the body a smaller body rose straight up. To this were attached eight fragile looking arms which ended in long, flexible, finger-like tendrils. This smaller body was topped by a head that looked more like the bud of a giant aster than anything else. The skin of the creature was hard and woody, a dark blue green in color.

"Let's get going," Turlogh ground out impatiently. "We've got to get to the tunnel entrance before they do or there's no telling what we'll get into before we can rescue Frances."

Without waiting to see what the others would do, Turlogh broke into a clumsy trot cursing the space suit which held him back.

He reached the wall of the bubble and saw a dark opening looming a hundred feet to his right. As he looked, several bounding figures dashed into the opening. Two of them were carrying the space-suited figure of Frances between them.

With his breath tearing at his lungs in agonized sobs, Turlogh dashed after them, hesitating at the mouth of the tunnel only long enough to be sure the Captain and his men had seen him go into it. The tunnel slanted sharply downward.

Turlogh braked to a stop. If this tunnel led to the third bubble and continued in a straight line through the planet, there would be a long hard climb at the other end. If they could find some kind of a car which could coast along the smooth floor of the tunnel, its momentum would carry it most of the way so that any time lost in looking for a conveyance would be more than made up by the speed with which they could travel.

He spoke through his microphone telling the Captain of this plan. At once the Captain and the men spread out to look for the nearest of the several cars they had seen setting idly along the roadway.

While Turlogh waited he tried desperately to contact Frances through his radio but got no answer.

One of the men discovered a shed a short distance from the mouth of the tunnel in which were cars designed to travel through the tunnel. He called for help and soon a car was poised at the tunnel's mouth ready for the journey into the heart of the planet which Turlogh fervently hoped would lead safely to the third bubble.

AS THE car gathered momentum it seemed to threaten to pull the men loose from their precarious perches on its surface. Darkness was absolute. The car bounced from one side of the tunnel to another, rider wheels on its sides fending the car off from the walls which rushed madly by. Hour after hour the car gained

in speed until finally an imperceptible shift in acceleration told the men that the long upward path toward the surface had begun.

Turlogh peered ahead through the stygian gloom fearful that the car would overtake the fleeing creatures and plow into them, killing Frances along with them. As the car began to gradually slow down on its upward climb Turlogh began to wonder if they had taken Frances along this tunnel. Unless they had had a car hidden a short ways down in the tunnel they should have been overtaken long ago.

There was no way of stopping, however, and if there had been, the momentum gained on the long downward trip would have to be supplanted by slow and tedious muscular exertion. It would be better to let the car coast to a stop and explore. If no trace of Frances and her captors could be found, then they could come back the same way they had gone in less time than it would take for them to walk. Finally the Captain broke the long silence.

"In our haste," he said, "we forgot about air. We don't have enough oxygen left in our tanks to get back to the ship even if we could turn around right this minute and go back as fast as we have come."

A desperate gloom settled over the company of men. Whether they found Frances or not there was no hope.

Suddenly the car gave a slight lurch forward and a faint vibration could be felt through its floor.

"There must be power at this end anyway," Turlogh exclaimed.

"Everybody ready for combat," the Captain ordered. The grim-faced men clung to the handholds on the car ready to spring off at a moment's notice of an airlock directly ahead. The

car slid sickly to a stop just beyond the airlock. Turlogh leaped to the ground, his electron gun held ready to blast anything that moved.

A HEAD loomed the vastness of the gigantic interior of the third bubble. No skyscrapers reared their stem-like structures toward the ceiling of this hollow sphere. Instead, acre upon acre of dense vegetation covered the floor. Above, a dazzling glow seemed to emanate from the roof with light that might have come from the sun.

Here and there through the vegetation could be seen creatures similar to that that Turlogh had blasted with his electron gun, scurrying ant-like in purposeless haste. None of them seemed to be aware of the arrival of the men. One near at hand paused before a leafy bush. Buds protruded from the bush in all directions, exactly the same in appearance as the buds that topped the insect-like bodies of the creatures. The creature who had paused bent forward, its bud-like head opening, the petals spreading out as if it were about to bloom. A bud on the plant opened in the same fashion. The two opened buds came together and closed to form a tight knot. Creature and plant remained motionless.

Full of curiosity, the men advanced until they stood behind this strange union of plant and animal. The knot that joined the two was vibrating rapidly.

"What goes on?" one of the men exclaimed. No one answered him.

A noise sounded at the back of the group. The men turned.

Hundreds of the creatures had crept up on them from behind. They were now advancing slowly, their flower-like heads open and fluctu-

ting hostilely. As a unit the men pressed the studs on their electron guns and cursed desperately when no lethal beam of electrons blasted forth.

"Atmosphere," groaned Turlogh.

The men reached for their automata. These blasted forth with deafening sound moving down the first wave of attackers. They were replaced instantly by others who rushed forward, blindly oblivious of the destruction that met them.

Turlogh unloosed the catch on his plexi-glass helmet and pushed it back so that it rested on the back of his suit, leaving his head free. He gulped refreshing drafts of cool, flower-scented air.

The waves of creatures were getting closer and closer before they were mowed down. They were now attacking from all directions, and the men formed a compact circle.

It couldn't last. There was no time to reload. With alien bodies piled four deep in front of them, the men were engulfed by a wave of the sweet-smelling insect-like monstrosities.

Turlogh felt something cloyingly sweet spread over his face. He opened his mouth to breathe. The syrupy stuff choked him. His senses swirled and he lost consciousness.

WHEN Frances felt herself borne into the air she cried out in alarm. Her senses reeled as broken spires and fragments of the bubble buildings rushed by her in insane lurches. Little by little she became aware of the creatures who were carrying her.

A few moments later she saw the dark opening of a tunnel in the bubble wall loom briefly before her. Then darkness swept past her and her only awareness was of her sickening rise

and fall from the grasshopper-like leaps of her captors.

After what seemed like centuries this stopped. She was laying on the floor and throughout her suit she felt the vibration of something approaching. The vibration rose in rapid crescendo to a peak and then descended the scale once more. She sensed that some rapidly moving object had passed in the tunnel.

The monotonous, jumping advance was again taken up. The rhythm of the slow leaps lulled her weary senses until at last she fell asleep.

How long she remained asleep she had no way of knowing. She was awakened by a blinding glare that hurt her eyes. She opened them to see a vast expanse of space which ended against a curving wall miles away over the top of a forest of dense vegetation.

The creatures that carried her did not stop. She saw the empty car just outside the tunnel opening and stared uncomprehendingly at the pile of hodies of creatures similar to her captors.

Something fumbled at the throat of her suit and her transparent helmet was thrown back. The sweet scented air entered her lungs with refreshing exhilaration. It was not until then that she realized the oxygen in her tanks was nearly exhausted.

She glanced curiously at her nearest captor. He looked to her like a giant katydid with a flower bud for a head. His grasshopper-like leaps had ceased and he was now trotting smoothly toward the fringe of the forest of vegetation.

Frances breathed deeply, preparing herself for an attempt at freedom. Her captors entered the forest and the blazing ceiling of the hubble was lost to view above the overhead limbs

and leaves.

The plants seemed to be all of the same kind; thick, trunk-like stalks rising briefly to merge into gigantic, foot thick leaves that spread their huge surfaces to catch every ray from the blazing, radioactive light above.

Short spikes radiated out from a bulbous mass at the heart of each plant. At the end of each spike was a bud that looked about to burst into bloom.

Frances was carried along deeper and deeper into this forest of strange plants. At last her captors came to a stop and circled one of the growths that seemed larger than the others. The huds on the radiating stalks of this plant opened wide, exposing bright red maws with honey-combed surfaces. One of the creatures stepped forward for the first time. Frances noticed that the hud that topped its body had also opened. The two huds came together and their membranous coverings intertwined to form them into a single hall. To all appearances the insect-like animal was now part and parcel of the plant itself.

Breathless with amazement Frances could do nothing more than watch as one after another of the group that had captured her joined itself to the plant. Plant and animals seemed to have forgotten her. Clumsily she ran away through the gloomy corridors, her space suit retarding her progress until the nightmarish scene was lost to view.

She had no idea where she might go to escape. She was completely lost. The landscape gave no clue as to which way she should turn to retrace her steps back to the tunnel. Panic clutched at her brain sending its nightmarish tendrils to her pounding heart. She wanted to scream and cry for help.

One of the strange creatures dashed by immediately in front of her taking no notice of her. She plunged madly forward not daring to stop, not knowing where she was going, until, completely exhausted, she dropped into the sandy loam and gave way to despair.

TURLOUGH'S senses returned slowly. He tried to move but could feel not the slightest sensation from his body. He felt as if he were a disembodied mind aware of his surroundings but with no material vehicle to obey his will. His eyes blinked every few seconds but he knew this only because of the momentary blotting out of his vision, not from any feeling the movement of his eyelids imparted to his brain. There was not even a numb sensation, not the slightest feeling of any kind came from his body.

Strange thoughts seemed to impinge themselves upon his consciousness as his interest in his efforts to make contact with his body waned. His attention turned to these thoughts.

They seemed to be strange,—alien, but as he concentrated they began to take on meaning. They seemed to be the thoughts of dozens of creatures around him, invisible to his eyes. His eyes could see nothing but the sandy loam that formed the floor of this vast forest, and the monstrous plants with their huge bulbous growth, their trunk-like stems topped by thick meaty looking leaves and their short flower stalks, radiating like spokes from the bulbous mass. Turlough's now alert consciousness began to piece together connected fragments of thoughts.

Except for their strangeness he might have believed them his own

thoughts. There seemed to be a general discussion going on concerning the arrival of the earthmen. There was a pause. Then the thought came, "Turlough is awake."

"Who are you?" Turlough asked in his mind.

"I, or we, are the mind of Pluto."

"Where are you?" Turlough asked.

"We are everywhere and no place," came the reply. "Physically we are embodied in the plants of this forest and the creatures, but actually we are not because the death of any of them does not alter our thoughts nor can any of them think as an independent entity. We are one and yet several."

"Are you the mind of the skyscrapers?" Turlough asked.

"No," came the emphatic denial, "that was separate."

"What are you going to do to us now that you've got us?" asked Turlough.

"That remains to be seen," came the reply. "If you come in peace you can go in peace. If you come to destroy as you did once before you will be destroyed."

"I suppose that you've got my brain out like you have Gar's," Turlough said. "I can't feel anything. All I can do is think."

"No we haven't," came the reply. "In a short while now all your faculties will return. You're just under the influence of a drug whose effects will wear off."

Turlough thought this over. "Why did you kidnap Frances?" he asked.

"We wanted you to come here," was the reply, "and reading your mind we knew that you would be certain to follow if we brought her forcibly."

"Where is she now?" Turlough demanded.

"She's here," came the enigmatical

reply.

Turlogh grunted. Then startled realization came that he had actually grunted. His senses were returning. He could hear physical sounds now. The slither-slither of the bubble creatures dashing over the ground in their senseless pursuits and an almost imperceptible rustle of the foliage of the plants around him.

"Is Gar still alive?" he said.

"The one you call Gar," came the reply, "is one of the few still alive in Bubble City. He is helpless but kept alive by the radioactive heat of his protective case."

NOW TURLOGH could feel the blood forcing through his veins and the sharp particles of sand against the palms of his hands where they dug into the soil.

He opened his eyes and stood up weakly. After a few staggering steps he felt his strength return.

The others of the party lay in various positions around him still unconscious. While he waited for consciousness to return to them he examined one of the strange plants.

A half dozen of the Plutonian creatures were attached to it. With a whistle of amazement he noticed that there were numerous small shoots growing out from the central mass to which were attached miniature additions of the full grown Plutonians. On its smaller stalks were round pods which from their translucent appearance seemed to be fresh growths. This then was the way the Plutonians came into existence. The plants of this forest were a curious combination of plant and animal life. The Plutonians were the animal fruit of the plant. Turlogh could now see the natural evolution of this animal-plant race as it developed into a skyscrap-

er civilization of multifaceted minds controlling mechanical robots in the same manner that they controlled the naturally grown animal creatures.

Somewhere along the line of the past a mechanical civilization had begun which eventually broke off from the parent mind and became a separate entity. Turlogh examined one of the full-grown animals attached to the nearest plant.

"Why does it have to attach itself?" he asked.

"For nourishment and to impart information," came the reply.

As if in response to his unspoken request the entwined wrappings of the connection between the creature and the plant rolled back and the connection broke with a soft sucking sound. Turlogh looked into the red maw of the creature and saw that it was moist. Droplets of a greenish fluid were forming on its red surface. Evidently the fluid passed from plant to animal and back again through the thin walls by osmotic pressure. The Plutonians were neither plant nor animal but a mixture of both.

The creature again joined itself to the plant. It reminded Turlogh of a calf nursing. He chuckled mirthlessly to himself.

The other men were now stirring. One by one they opened their eyes and stood up swaying until they regained their strength. The effects of the drug seemed to wear off as quickly as it had taken hold and there were no after effects. The Captain rubbed his forehead dazedly. "That's funny," he said, "I could have sworn I was talking to somebody just before I woke up."

"You were," Turlogh said with a grin, "you were talking to this," and he made a motion with his hand to include the forest around them.

"You mean that?" the Captain asked in amazement.

"Yes," Turlogh said crisply. "This forest has an intelligent mind just like the one we destroyed in Bubble City except that it has no mechanical civilization. This mass mind is embodied in those bulbous growths that form the hearts of the plants."

The Captain opened his mouth.

"Careful what you say," Turlogh said sharply, "the mass mind of this forest can read your thoughts." Then he closed his eyes and thought, "Take us to Frances."

"No," came the reply. "If we take you to Frances you will leave, and you must stay until we are sure what you intend doing."

TURLOGH told the Captain and the men what the Plutonian mind had just said. The Captain compressed his lips grimly.

"You say the brains of this mind are embodied in the bulbous centers of these plants?" he asked Turlogh. Turlogh closed his eyes and relayed the question.

"Yes," came the answer.

"Very well then," the Captain said, "tell this creature we'll start putting slugs in every bulbous mass around here until it consents to lead us to Frances."

Nothing but silence met this challenge. The Captain waited belligerently with his gun drawn.

Finally he pointed it at the heart of one of the plants and pulled the trigger. The plant shuddered convulsively and the creatures attached to it loosed themselves and ran off in panic. The Captain let his gun drop half ashamed of his act.

"I wonder what they'll do?" he whispered.

As if in reply, Frances appeared stumbling as she walked toward them.

Her eyes, reddened from weeping, showed their relief at her having found them.

Turlogh rushed forward to meet her. As he put his hands forward to embrace her she vanished.

A soft laughter swept around the men and the rustling of the plants increased. "There's our reply," came a voice in the mind of Turlogh.

The Captain cursed under his breath and sent shots into three more of the plants. The first plant was curiously shriveling up. The thick fluid was flowing from the gapping bullet hole on to the sandy loam.

"Stop," the voice cried in Turlogh's mind. He signaled the Captain to stop firing. Then the voice went on.

"You cannot possibly destroy all of me. If just one of the plants remains alive I will still exist. If you agree to leave Pluto and never come back I will return Frances to you and allow you to go unharmed. If you don't I will send my creatures against you once more."

"How do we know," Turlogh asked, "that you won't try the same thing that Bubble City did? After all we are a civilization too, and as long as we think you are a threat we will try to destroy you. If you kill us the fleet will blow up your bubble and destroy you before they go back to earth."

"We have no desire for conquest," came the reply. "We are the ones who chose to remain aloof from a mechanical development."

"What's the use of arguing with it," one of the men said despairingly, "we haven't got enough oxygen to get back to the ship anyway. Let's start a fire and burn down the whole shootin' match."

A wave of terror blasted onto Turlogh's mind from the plants.

"Ha," the Captain exclaimed, "so it's afraid of fire." A familiar voice swept into Turlogh's mind.

"Is that you Turlogh?" it asked.

"Gar!" Turlogh exclaimed with a glad cry.

"Yes, Turlogh," came Gar's reply.

"Where are you? Turlogh asked.

"I don't know," Gar replied, "but don't do any more damage. The mind of the forest is not like the mind of Bubble City. It's honest and peaceful. It knows where I am but can't do anything to help me, but if you agree not to destroy the forest they will show you where I am and will help you get me off the planet."

"Can you contact your body in the space ship?" asked Turlogh.

"No," Gar replied. "The physical connections are broken, but they can be restored."

"If you will agree to leave in peace," came the thoughts of the forest, "we will return Frances to you and show you where Gar is."

"What do you think?" Turlogh asked the Captain.

"Well," said the Captain, "I guess we can take precautions to keep the forest from ever being a threat to the earth. We can set up our own screen around Pluto to blast anything that leaves Pluto's surface."

"Do we agree then?" Turlogh asked.

"Sure, go ahead," the Captain said.

"One of my creatures will lead you to Frances," came the voice of the forest.

ONE of the Plutonians detached himself from a nearby plant and started off through the forest. The men followed. After half an hour of wandering they saw Frances ahead.

She saw them at the same time and broke into a trot running toward them. Turlogh dashed to meet her

and threw his arms around her bloated space suit, kissing her before she had time to protest. This time she didn't vanish. She was real.

The creature that had led them to Frances turned and started off in a different direction. They followed him. Soon they came to the edge of the forest where it grew up almost to the wall of the bubble. A spring of steaming fluid trickled from a small opening in the wall. Before it reached the ground it evaporated. A blast of frigid air seemed to come from this spring.

"This is liquid air," came the voice of the forest. "You may replenish your oxygen tanks here."

"Oh, boy," one of the men exclaimed, "maybe we'll live through this yet."

The men began unstrapping one another's oxygen tanks. The suit connection to the tank was a short elbow which reached the tank at right angles. One after another the tanks were held under the stream of liquid air until they were full.

When the last tank had been strapped back into place the Plutonian started off following the curvature of the bubble wall at the fringe of the forest. Half an hour later the car upon which the men had ridden from Bubble City came into sight. The men piled on to the car, with Turlogh and the Captain lifting Frances to a safe position on it. The Plutonian also hopped on and then the car started with a slight hum. The long journey back to Bubble City had begun.

Several hours later in the blackness of the tunnel the car drifted to a stop, its momentum exhausted. Quickly the men leaped off before it began its return to the third bubble.

The Plutonian stoically started up

the steep incline. They followed. Before they had gone very far, a white disk of light appeared in the distance ahead of them. It was the end of the tunnel.

The Plutonian reached it ahead of them and stood waiting until they could catch up, then he started off through the wreckage.

At last he stopped before an entrance in the base of what had once been one of the giant skyscrapers. Then he led the group to this building and to a doorway which led into an inner room. He stepped aside. Turlogh pushed past him into a small square room with a low ceiling.

On a pedestal in the exact center of this room was a transparent sphere in which a cloudy vapor swirled lazily. Floating in this vapor or liquid was a human brain, a flexible tube leading from down to the pedestal upon which the sphere rested.

"So you got here at last," Turlogh heard Gar's voice in his mind.

"My, how you've changed since the last time I saw you," Turlogh said, grinning.

"Ob it's not so bad," Gar replied. "I'm used to it now."

"Can you see us?" Turlogh asked.

"Vaguely," Gar replied.

"How the heck are we going to get him out of here?" the Captain burst in.

"There's only one way you could do it," Gar's voice sounded in Turlogh's brain. "It would be impossible to take my brain out of this sphere without killing it. You will have to take me, sphere and all, or leave me where I am."

"Turlogh," Gar's mind continued, "the robot control room is just above this. The connections from my brain down through this pedestal hook on to a cable which leads to that room.

Either there's a break someplace or, what is more likely, the power source is gone. If you can find the trouble I have a robot on each of those space ships circling the planet. With my robot controls restored I can make all of those ships destroy each other."

Turlogh relayed the information to the Captain. "That means we'll have to get a technician down from the ship," the Captain said. "Maybe he can find the power source and restore it."

TWO WEEKS later the winch on the edge of the cliff, now transformed into a full fledged derrick, slowly lifted a large packing case from the floor of Bubble City. It swung lazily as it rose higher and higher. Perched on the top of the case were space-suited figures with long poles to fend the box away from the sides of the cliff.

When it came even with the winch it was pulled carefully inward and dropped on to a car. Three jeeps hooked to the car pulled the packing case up the steep spiraling incline to the surface and out into the snow of frozen air crystals, to the cargo port of the space ship. In this packing box was the brain of Gar in its transparent sphere, and the robot control banks. Frances and Turlogh followed the truck anxiously. At last the packing case was slid over through the port into the ship's storeroom. When the port cover clanged shut, Frances heaved a sigh of relief.

"That's over," she exclaimed. "I was so afraid the cable would break when they lifted him, or the truck would tip over. Now everything's all right and we can take him back to earth where he can live a normal life again, —I hope."

One by one the space-suited figures entered the ship and climbed out of

their suits. An hour later with a blast of rocket jets that sent steamy clouds shooting for miles behind them, the space ship took off, followed in rapid succession by the other ships. Faster and faster until the curvature of Pluto's surface could be seen through the view ports.

Far above, the silver flashes of Pluto's defense screen of space ships could be seen. They were no threat from below as they were set to fire only on approaching objects from above. Soon these were left behind and the rising space ships approached a cluster which was the main earth fleet.

Slowly the procession of ships headed inward toward the sun. Pluto grew smaller and smaller as the hours passed until finally it was lost in the blanket of stars that formed an almost uninterrupted screen of light out in space.

Technicians were at work on the robot control bank attached to Gar's brain. One day, when the earth had begun to loom largely in the firmament ahead, Turlogh and Frances were standing side by side looking out the forward view port. Suddenly they were startled by a familiar voice behind them. They turned in surprise. There stood Gar!

"Gar," Frances cried rushing into his arms.

There were tears in Gar's eyes as he folded his arms about his sister but there was a smile of happiness on his face as he looked over her head at Turlogh. Finally Frances stood back and looked up to her brother.

"Do you feel all right?" she asked. "Fit as a fiddle," he said.

Frances turned to Turlogh. "Well, come on. Say something," she said to him. "Don't just stand there like an

idiot."

"Hello sucker," Turlogh said with a grin. "I hope you will enjoy staying out in space because you can't ever go to earth."

"Why not," Frances asked in surprise.

"He wouldn't dare to," Turlogh said. It was Gar's turn to look puzzled.

"What do you mean?" he asked.

"Well," Turlogh said with a grin, "here you are and your brain is in the storeroom. You know what they do on earth to guys that are out of their head, don't you?"

It was several months later back on earth that Gar, Turlogh, and Frances sat side by side in the rear of a taxi speeding along Michigan Boulevard in Chicago.

"Just like old times, eh?" Turlogh said. Then he added, "Only nicer, now that I know you've got a sister. To think that all these years we've bummed all over the system together you never once mentioned that you had a sister!"

"Well," Gar replied, "you never asked me. Anyway I felt it my duty to protect her from you."

"What does the government say about your brain?" Frances asked.

"There're fixing it up in a sort of a portable motor car," Gar answered. "I don't need it with me because the contact is good over almost any distance, but one of these days soon we will be going back up into space and naturally I'll have to take my brain along."

"Did you say 'we'?" Frances asked.

"Of course he said 'we'," Turlogh broke in. "You don't think we would leave Gar behind do you?"

THE TAXI sped on through the night, with its three passengers silent, each intent on his own thoughts; Frances' anticipating the evening's entertainment before them,

and Gar's and Turlogh's by coincidence dwelling on the same things.

Out in space, so far away that the sun became only a dim star, competing with others that were light years away, a fleet of ships circled Pluto endlessly. On them were robots which Gar could control through his now repaired control bank. There were weapons and instruments on these ships which would yield secrets that the earth could use to advantage.

The two men were not thinking of these, however. They were thinking of what these ships could mean to them. A fleet of their own! Atom powered and powerful.

Adventure! With these ships they could travel the spaceways to their hearts' desire. With Gar's mind operating through robots, he could explore the sun, Jupiter, Neptune, and places where living flesh would die instantly.

Gar's thoughts turned to the Mind of Pluto. He missed it here on earth. After the destruction of Bubble City, Gar had made his first contact with the giant intellect housed in the forest of fantastic growth in the third bubble. Before long he had merged with it and become One with it, almost forgetting his own individuality, and he had learned much and experienced thoughts and feelings beyond the comprehension of ordinary mortals.

Godlike thoughts that could only come from a mind that had lived for

millions of centuries as an active, forever young mentality.

As the taxi sped smoothly along, his mind reached out across the vast abyss of space that separated the two worlds and touched briefly that vast Mind, and felt its wisdom and strength flow into him.

The contact comforted him. No matter where he roamed he could always reach out to it and enlist its aid. He could always reach across the void and join it,—become One with it.

The mind is a peculiar thing. It is a Unity and yet an infinity. It can set up local centers of awareness that act as separate entities; and these can function as One or as many.

In the normal man the vision centers, the auditory centers, the reasoning centers, and all others, act independently and without interfering with one another. Yet their activity can be joined in higher and ever higher centers so that they become the parts of one mind and person.

With telepathy that is as sure and swift as thought itself, individuals can merge their individual consciousnesses into greater and higher units, so that the many become one, vast Mind that is the functioning of the Whole, as it is with the Forest Mind of Pluto.

The taxi sped on, and only the click of the meter and the little clucking sounds of the tires on the pavement disturbed the silence.



ACCA LARENTIA

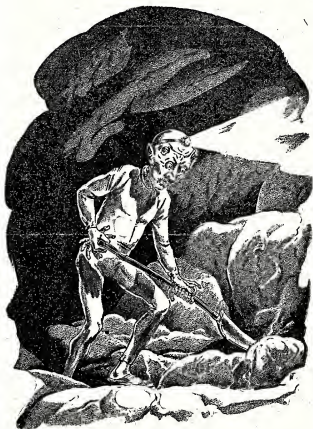


By H. R. STANTON

ACCA LARENTIA, according to Roman legend, was the wife of the shepherd Faustulus who saved the lives of Romulus and Remus. Romulus and Remus were the two little boys whom we have been told were reared by a forest wolf. In trying to explain this wolf legend, it has been suggested that Larentia was called "lops," meaning "she-wolf" because of her immortal character. According to another story, La-

rentia was a very beautiful girl whom Hercules won in a dice game. He advised her to marry a wealthy Etruscan named Tarutius. She inherited all his property and then gave it all to the Roman people who were so grateful that they instituted in her honor a yearly festival day called Larentalia of the Lares, and symbolized the fertility of the earth, particularly the Roman crop lands.

FIVE YEARS IN THE



He stood in the alien mass and slowly began to work with the shovel, digging deeply . . .

MARMALADE

By GEOFF ST. REYNARD

The Martian was a queer little being whose mind could create anything from gold to lead. But marmalade was something else!

FRESH FROM Alpha Centauri, fresh from the wicked glare of all those gigantic suns, still ridden by the memory of drinking water that tasted like quicksilver and curious pawing little Centaurians who smelt of decayed garlic, Moleath and D'Angeur flopped bonelessly into a pair of cushioned seats opposite the great plastiglass north casement of Old Terra Spaceport IV. They heaved a sigh of luxurious relief in perfect concert. They were home.

"Never again," said Moleath. "Not this century, anyway. Not until they find a way to make it taste like water."

"And deodorize the natives...." agreed D'Angeur emphatically.

"And allow Venusian comfort-women..."

"And decide to buy radium, the idiots, blast 'em!" finished Moleath, grinning, for they were advance agents for a radium syndicate.

"Yes, that especially. Whistle up a couple of beakers of gim," said the other. "I swear I still taste mercury."

Moleath whistled shrilly between his white teeth. "What say to a vacation, Rohespierre?" he said abruptly, using the Frenchman's nickname. "A time-trip to Rome for a week? Julius Caesar's Rome, I mean. Have a tailor make us a toga apiece, and—ah, the gim," as a waiter skidded up with two scarlet glasses of the liquor-mix. "Here's plenty of space and a roaring ship."

"And an ivory moon to land on," said D'Angeur, completing the traditional toast of the Astral Travelers.

Moleath drank and smacked his lips. "Man!" His face lit up. "No more quicksilver!"

They were silent then, watching through the casement with contented eyes the efficient brisk workings of the spaceport spread out before them.

The ship that had carried them, home, the enormous silver Comet Twelve, lay in her lane like a sleek metal panther awaiting her moment to pounce out into space; beside her a rust-spotted tramp freighter was refueling for a routine hop to Luna, while another of Terra's Outer Dark Line, Comet Forty-Three, occupied lane four. The third lane was empty, its green-painted length a soothing eye-aid for the radium agents after Alpha Centauri's infernal brilliant yellow. Unconsciously, they both stared at the empty lane, their faces slack and their minds at peace.

"Good to be home," said D'Angeur after a long quiet. "I often think a man doesn't appreciate Terra until he's been all over the spaceways and seen a score or two of planets. Then he can settle down and look at green things and know what a blessing they are."

"Venus is green enough, I should think, even for you."

"If a man likes to live in a fluid-suit and heat off the comfort-women all day long. No, there's no place like

home."

"You have just heard pearls of wisdom from an original philosopher," said Moleath satirically, "who will speak to you next week on 'How I Coin Clever Phrases.' Thank you, Mister D'Angeur."

"Moleath, look there," said the Frenchman suddenly, leaning forward. "In lane three. That's interesting."

"What is it, a Saturnian smoke-man?"

"No." They were watching a small mist that was forming against the green. "I'll wager you five grains of prognarite that's a Martian coming in via single-trav."

"You're right! I wonder where he's been? I hear they can go anywhere at all in those damn things," said Moleath.

"I don't think we know the half of it. I've heard the weirdest rumors.... Say, let's get him in here and talk to him. I never met one of their travelers."

"Sure, I'd like to. He's coalescing now."

THE MIST thickened, solidified, and turned into a small Martian encased in a flexible single-trav, the miraculous creation of long-ago scientists on the red planet. He unzipped it, stepped out, casually folded it up and strapped it into an insignificant package. Then he came pattering toward the dromé, his sandaled feet swiftly flicking the surface of the lane in the quick nervous gait of the Martian peoples.

"They say those little guys can not only go on intergalactic trips in those flimsy envelopes, but can time-travel, too. They're supposed to be so powerful, the single-travs I mean, that only a handful of their men are licensed to use 'em. I never even heard of them till last year, but I'm sure they're a

lot older than that."

"He's coming in," said Moleath. "Motion him over."

"Hi! Over here, *kanlore*," shouted D'Angeur, using the Martian term for friend. The little fellow skittered over. "Sit down, won't you?" He introduced himself and Moleath. The gray-clad Martian smiled and bobbed his head.

"I am Smith," said the outlander in Terrestrial. "Of the Martian Sunhound Museum of Intrastellar Knowledge. How do you do? I see by your pupils you've not been in long."

"Alpha Centauri, and hope to see it again—in a million light years or so. Your own pupils are wider than a trip across the continent would make them," said Moleath. "May one ask...?"

"Oh, yes. Mercury. A very interesting place indeed." The Martian grinned, and his four eyes, set into the four corners of his square little face, crinkled with amusement. "A fascinating stay. Twenty years."

"Twenty years on Mercury. Heaven preserve us!" murmured D'Angeur piously. "Give me even the mercury-water of Centaurus in preference to the fog-water of Mercury."

"My friend is French, and addicted to horrible puns. But twenty years!"

"A flick of the fingers." Smith, the Martian, gave both of his rubbery twelve-fingered hands a wave.

"To you, yes. To us—a tenth of our lives. We don't live two thousand years apiece, but a paltry two hundred." A wry smile took away any implication of jealousy there might have been in Moleath's speech.

"What were you doing there?" queried D'Angeur.

"Observing. It's my job," said Smith, whose actual Martian name was probably so full of clicks and fizzes as to be unpronounceable.

"By the way," said Moleath, as the waiter came sliding up with three more scarlet glasses, "you came in with one of those new single-travs, didn't you?"

"One of the ancient single-travs," corrected the Martian. "Mine is some centuries old."

"They're new to us."

"Oh? Would you like to know about them, then?" asked Smith courteously. His four-eyed face, with the speech orifice in the center, expressed as well as it could a desire to be informative. "I've often thought it too bad that you chaps can't use them too."

"Why can't we?" asked D'Angaur.

"It's your brain waves. They would tear the travs to pieces, even if you could get them started, and there you would be, barreling along in interstellar space all by yourself whereas our own thought waves, being of a far different type from yours, are perfectly adapted to guide them without accident."

"Then they're not strictly mechanical?"

"Jove, Jupiter and jackrabbits! No," exclaimed Smith. "They're hardly mechanical at all."

"Then what's the force that drives them?"

"My brain. Our brains. Our thought impulses. When we travel between planets, for instance, we don't actually go via space, as you do in your ships, but via the dimension-warps."

"But then why are your pupils distended, like our own always are after flight?" asked Moleath keenly.

"I don't know exactly. It seems to be a by-product of any sort of travel between the planets, whether by rocket or by single-trav. Even when you're teleported to Mars, as one or two of your men have been recently, you arrive with wide pupils. Funny," mused Smith, sipping the gim-liquor

through a straw. "Don't ask me why, I'm merely an observer."

"Look here, *kanfore*," went on Moleath, leaning forward, "when you say you run these things by thought waves, d'you mean you just zip into them and *think* yourselves somewhere else, and there you are?"

"Oh, well, not quite that simple," said Smith. "Look here." He placed the folded trav on the table between them. It looked something like a plastic raincoat. "See those?" The Martian pointed to a circle of small dials and levers set into the thin material. "Those are in front of one; they take care of speed, size, direction, and so on—but the motivating force behind them is here." He tapped his rubbery fingers against his quaint little head. "Without the peculiar type of waves my brain sets up, this is little more than a flexible tent of transparent plastic."

"Well, that is interesting," said D'Angaur. "Zut *alors*, as my ancestors were fond of exclaiming, and like wise *sacre bleu*. What do you mean by size?"

THE DIAL for size? Most important. Suppose I go to a planet or a land where the inhabitants are all four inches tall. Without this size adjustor I appear among them as an incredible monster. Suppose, for example, I go to Lilliput."

"Lilliput? Where's that?" asked the Frenchman.

"It's one land into which our friend Smith will never single-trav himself," said Moleath, laughing. "It was an imaginary island invented by Dean Swift, some few centuries ago, and populated by infinitesimal pygmies."

"Precisely," said Smith. "Well, suppose I go to Lilliput—"

"Oh, but take a possible example, at least!" said D'Angaur. "Take that

little planet in the Vernaluc galaxy, what's its name? Its inhabitants are only about a foot high. Take it."

"But the inhabitants of Lilliput," insisted the Martian pedantically, "are for the most part under six inches. Now if I had not taken care to set this dial in such a manner as to shrink me to the average local size, then they would have called me Quinbus Flestrin, or the Man-Mountain, while I lived with them; whereas I was known simply as Hurgo Smith, or Lord Smith, the One with Four Eyes."

"Forgive me, but the astral voids have evidently affected my hearing ... Did you say 'when I lived in Lilliput'?" asked Moleath sarcastically. The Martian nodded.

"I let it out, didn't I? Yes, I lived there. For about eight years. A very interesting place indeed."

"But there never was any such place as Lilliput!"

"Oh, but there was—there is. Since, of course, all times and dimensions exist coeternally, it was a simple matter to single-trav myself there."

"But Swift made it all up!" shouted Moleath, forgetting politeness. "He made it up out of whole cloth!"

"Certainly he did. But he believed in it, after a time—as so many authors come to believe in their own creations. And so it, of course, exists."

"Oh, come," said Moleath weakly. "You're joking."

"Not at all," said Smith seriously. "There is the essential difference between the power of the rocket, the power of the time machine, and the power of the single-trav. This little bundle," he tapped the plastic with a boneless finger, "while containing all the powers of the other two devices, adds the invaluable attribute of being capable of transporting one (if one is a Martian) into the most difficult

dimensions of all—those formed by the power of the imagination. Let me give you a little lecture," he said, squirming nervously and staring into their doubtful faces. "What is the force behind all life, all inanimate objects, all the universe? It is thought. It is the incredible power of *mind*—never mind whose. Mine, yours, the Venusian comfort-women's, and above all whatever supreme force is running the whole shebang."

"Granted," said D'Angour. "With reservations—granted."

"Oh, with no reservations, believe me. We have known the principle for aeons, and your race is coming to accept it too. You, perhaps unfortunately, are limited in your ability to use the waves, or cells, or impulses, or whatever you choose to term the untermable entities, that make up your minds. You can build incredible machines which it has never even occurred to us to build; you can conquer space with legions that are all but invincible; but you cannot venture into the realms of complex thought as we can. I mean no offense," he added hastily.

"None taken, sir. He's perfectly right, Moleath," said the Frenchman.

"Yes, he is. Well, about the trav. Go on."

IT CAME to be known to our men of wisdom many ages back that the creations of man's spirit and imagination were in their way as permanent and solid as the creations of his hands. I use your Terrestrial word 'man' to signify any thinking being in the universe. When the trav was perfected, the first places our pioneers went were Mvrlxka and Ghkxlx."

"Gesundheit," said Moleath inaudibly.

"Those are the Martian—err, Fairy-

land and Heaven," said Smith.

"And they were there?"

"Surely. Too many Martian babies had believed in the first, and too many adult Martians in the second, to admit of their being anything but realities."

"Anything believed in the heart can be proven," said D'Angeur softly.

"Exactly. And exists, too, in dimensions as concrete and self-sufficient as the spaceport."

"But, great Aldcharan, look here!" burst out Moleath. "I grudgingly admit the possibility of your Fairyland, and your Heaven, and even of your Lilliput. A lot of children have believed in that one for hundreds of years, too. But what about just ordinary books? Take that one *What's-his-name—Jefferlap*—wrote last year, about the place where everything was black and mauve and nobody sat still for more than two seconds. You mean to tell us...."

"No. That was a satire on our civilization," said D'Angeur. "I'm sure the man didn't believe in any such place, and so, presto, no such place exists. No powerful thought-impulses to create it."

"That's right," said the Martian.

"But Lilliput was nothing but a satire."

"Which the children of Terra made their own," said Smith. "And believed in. You have no notion what a lot of thought-waves a couple of hundred generations of kids can send out!"

"Where else have you been?" asked D'Angeur.

"Oh, a great many places. The Mercurian Hell, for one. It's really not a bad place. Most interesting."

"Mercury's a horrid enough place without the natives making up a worse one," growled Moleath. "Say, I wonder if there's a private Hell on Alpha Centauri?"

"With water that tastes like water," said his friend. "Where else were you, Smith?"

"The time before that I was with Hereward the Wake when he fought against the forces of William the Conqueror. A fascinating man, Hereward! You should time-travel back some day," said Smith. "Then before that, I spent twelve years in Utopia."

"Sir Thomas More's Utopia?"

"Yes."

"But he never believed...."

"Oh yes he did," said the Martian a trifle smugly. "I know. I lived there. A very interesting place indeed. I found it, for example, quite charming to go into the streets when it rained, rather than to go into the street when it rained."

"What'd happen if you set your little trav to go someplace and it really didn't exist? Suppose you read of a place and decided to look it over and found that no one, not even its creator, believed in it at all? Where would you end up?"

"I don't know," said Smith slowly.

"I might not leave the place I started from. Again, I might... I don't know. It's never happened."

"Look here, old chap," said Moleath, "you say you've been to a heaven or two."

"Yes. Including your American Indian's happy hunting grounds. A very interesting place indeed."

"Well, if they exist, do you think that implies that a fellow is going to go to his own particular heaven when he dies, if he really believes in it? If, say, there's a happy hunting grounds, why then, are all the defunct Indians there?"

"Upon that question," said the Martian primly, "I have no information whatever, and could certainly hazard no guess."

"But you claim to have been there."

"I was there fourteen years, and now I can probably shoot an arrow as well as any man living. I saw many millions of Indians. Whether they were the souls of the departed or simply inhabitants like the Lilliputians, I could not say. I am no theologian."

"Where else have you been?" asked D'Angeur. He was not sure he believed all this, but he found it fascinating.

"OH, A GREAT many places.

Mercury was really off my beat. I have specialized, rather, in your Terrestrial legends and stories. The Fortune Isles; Campanella's City of the Sun; El Dorado; Mu; Cabet's Icaris; Plato's Republic; the Greece of Pan and the gods—they thought I was one of them, since I wasn't any sort of human being—I could tell you tales of the satyrs... yes. I found them all very interesting places indeed."

"Have you ever been to a place you couldn't designate as 'very interesting indeed'?" asked Moleath.

"Oh, no! I find everyplace has its points."

"Some time you must take in Alpha Centauri."

"I'm scheduled to go there after I visit Erewbon," said Smith.

"Aha, I have you!" shouted Moleath. "Erewbon," is nothing but Butler's anagram for Nowhere. By its name it belies its existence! You'll find yourself utterly nowhere."

"Names are labels and mean nothing in comparison with the force of thought," said the Martian calmly. "I shall be very interested in Erewbon."

"And what do you do with all the information you gather on these places?" asked D'Angeur. "Do you write it up?"

"Yes, and submit it for the archives of the Sunbound Museum of Intraso-

lar Knowledge. It's my job. Some day we'll have data on every dimension and then—then we'll know."

"Know what?"

"All about every dimension," said Smith, grinning in the center of his square flat face.

"Robespierre, what do you think?" asked Moleath of his friend. "Is our *kanlore* here tugging at our collective legs, or is he admitting things no Martian ever admitted to us before?"

"We're not secretive, you know," said Smith, interrupting. "It's just that we don't like being called liars any more than Terrestrials do, and how many earthmen would refrain from calling me a liar if I said I was going to Atlantis next Friday?"

"Are you going to Atlantis next Friday?"

"No. As a matter of fact my schedule's been messed up, and my time's my own for about five years," said the Martian. "I was just exempling."

"Well, it's all very astounding, and I'm much obliged to you for telling us about it," said Moleath. He caught the Frenchman's eye and gave a swift wink. "I know where I'd go if I had five years and a single-trav at my disposal. If I had your thought-wave-length, that is."

"Where?" asked the Martian quickly.

"Why, I'd go to Marmalade!"

"Marmalade?"

"Marmalade," repeated Moleath emphatically. "The grandest country that ever was thought into existence in its own little dimension."

"I don't seem to remember Marmalade," said Smith in a puzzled tone. "Who invented it?"

"A fellow called—um—Thealom. Sebastian Q. Thealom. He wrote about it a couple of hundred years ago. Talk about your lands of cakes and honey! Marmalade has 'em all beat fifty ways

from the jack."

"What was it like?" asked D'Angeur. His voice was suspicious.

"Why, it was all the glories of Greece and Rome poured into a mold and leavened with eternal sunshine and superb women and perfection of food and drink—salted with the glamor of Poictesme, and the mysteries of lost Atlantis—and topped with the absolute peace of mind of Shangri-La!"

"You left out the grandeur of Cathay," murmured D'Angeur.

"Marmalade," said Smith. "It has a romantic sound, hasn't it?"

"As romantic as the seacoast of Bohemia."

"Or as a piece of bread and jelly," said D'Angeur. "I never heard of it."

"It's an obscure volume, I suppose, 'The Happy Voyage to Marmalade', but a fascinating one. You could tell as you read it that old Tbealom believed every word of it."

"I had in mind," said the Martian, sipping at his gim, "to visit a while in the Mohammedan Paradise. But then a chap couldn't get the most out of it unless he was prepared to stay at least six hundred years...."

"Why?" asked Moleath. "Oh, now I recall. Never mind."

"DO YOU think I'd be too anomalous in your Marmalade?" asked Smith eagerly. His face was alight now. "Most of the inhabitants of these utopian dreams are pretty tolerant, but once or twice I've been mistaken for the Devil himself. I am somewhat different from you fellows he added, grinning. The earthmen looked at his fantastic face.

"Yes, you'd show up in the streets of Imperial Rome like a sun-blister on milady Cleopatra's nose.... No, in Marmalade all the people are democratic to the verge of idiocy."

"Very well. I make up my mind quickly. Marmalade it is," said Smith. He drained the last of the gim from his scarlet glass. "I'm much obliged to you. The least I can do is let you watch me leave this dimension." He rapidly unfolded the single-trav. "I slip inside, thus—I zip it up, thus—now can you hear me?"

"Perfectly."

"I set the size dial, so that no matter what the bigness or littleness of this projected destination, I shall be scaled to size automatically.

"I set the speed dial to zero, since I am on Terra and this country will lie comparatively close.... Now I adjust the warper, the regular whisk and the extra-teratism whisk, the screener and the atmosphereith.... Now I am ready. It remains to concentrate my thought-impulses on Marmalade. I am about to begin. Goodbye, gentlemen."

"But, really, I never—" began D'Angeur. Moleath pinched his arm rudely.

"Shut up!"

The Martian frowned, his quartet of eyebrows coming down in four intense arcs of concentration. There was a very faint splutter, like a candle-wick burning out in its own grease, and he was gone. The space where he had stood in his single-trav was vacant.

"Well, I'm damned," said D'Angeur. "He went to Marmalade."

"If he did," said Moleath, throwing himself down into the soft padded cushions of the chair with a shriek of laughter, "if he did, he'll be solar-hermit lonely!"

"What do you mean?"

"Why, Robespierre, my dear old serious frog, he sat here for one mortal hour pulling your leg till I thought it'd come off—so I just pulled his!" He howled with mirth. "Now he's gone away, probably to

Mars or Venus, thinking he's fooled us blind—while all the time I knew he couldn't go to Marmalade, since I made it up on the spur of the moment. Sebastian Q. Thealom! Thealom's an anagram of Moleath. There's no such place as Marmalade in legend or literature. Any more than there are dimensions containing Erewhon, and Utopia, and Cockaigne."

"But I think he was telling the truth," objected D'Angleur.

"Oh, Robespierre! Go atomize your cars. I admit that single-trav of his is a beaut of a space-eater, and maybe even a time machine in addition, but when it comes to visitin' imaginary islands and made-up cities, oh, really! You know those Martians are the greatest jokers in the system."

"I grant you that. But I believe Smitty was telling the truth, unvarnished and complete; and if he was, and he finds out you whooped him off on the trail of a wild goose, I shudder to think of what a comeback jest he may think up for you!"

"I'm equal to any four-orbed rubber-boned bag o' nerves," said Moleath. "I like the little guy, but if he tries a topper on me after filling me full of all that unadulterated space-juice, I'll just hold him by his topknot in the flame of a comet till he turns green!"

"Still: imagine he was telling the literal truth for a moment; then where is he now? In Marmalade?"

"He can't be. For even if his yarn was straight, how can Marmalade exist if I, its creator, don't believe in it?"

"But if Smith does?"

"He doesn't know enough details to really believe. No, if his story was fact, then he's probably floating somewhere between here and Luna, looking wildly for a spaceport."

"I wouldn't want to see him hurt

as a result—"

"Neither would I," said Moleath soberly. "But, greased rocket jets, he won't be! If it's not there, he'll come back. Those travs are pretty well foolproof, I imagine."

"Then he'll come back and play a gag on you that'll crisp your hair worse than the water on Alpha Centauri," said D'Angleur. "You know the four-eyed fellows have the most violent senses of humor in the universe, for all they're so little and polite."

"Oh, well, he was only having himself a time foxing us, anyway," said Moleath with assurance. "He's on his path to Venus, I'll bet, laughing sockets!"

WHEN THE single-trav began to shiver ever so slightly, as its preliminary to halting in the new dimension, Smith the Martian touched the tiny lever which permitted him to hover momentarily into Marmalade.

Utter and unrelieved blackness greeted his stare.

He grinned in the peculiar manner of his race when among their own kind or alone: his four eyes slanting inward toward the speech orifice in a rather horrifying manner. Something told him it was not night in Marmalade....

He had looked briefly into Moleath's mind when they first met, his thought-tentacles probing through the Terrestrial's subconscious, and had found there no evil guile. He knew the man would never have sent him deliberately on a dangerous journey, so with only the shortest of halts he swung the single-trav into action again. Motivated by the curious force-rays that emanated from his brain, it plunged through the dimension barriers and came to rest in the absolute darkness.

"*Mens sequit in arduis,*" said the

Martian to himself in Latin: the old Stoic philosophy, "retain an even mind in difficulties."

The atmospheric tester, the atmosphere-thing, showed the surrounding "air" to be a thin liquid; he noted the various elements making up this liquid, and with his rubbery fingers he did certain things to his metabolism mechanism, unzipping his gray shirt for the purpose. The subdued glow of the single-trav dials was his only light. Then he slipped from the plastic envelope and walked out into Marmalade. The odd watery liquid flowed through his system, and his metabolism mechanism began to absorb the elements he could not use and discard them, while he breathed freely and comfortably.

For a moment he made no move to bring light to Marmalade. He was content to stand in the jet darkness and smile quietly to himself. There was no noise other than an almost inaudible throbbing, something like a very distant surf upon incredible uncharted shores of mystery.

At last he raised a hand to the metal crown-like affair that all Martians wore tilted back on their craniums, and switched on the powerful cold floodlight in the center. Instantly the entire world of Marmalade was vivid with day.

The strange calm of this uninhabited land pleased Smith; already he could feel his nervous tension smoothing out, and he said to himself that perhaps nowhere else would he find such quiet, such freedom to rest and cogitate; an earthman would have gone mad in such a landscape, but Smith knew he could live there indefinitely without growing either impatient or weary. In the background, invisible, the beating surf rolled on against the unknown shore, and Smith looked about him and

smiled.

He stood on a little hill, a hill that appeared on the horizon far away, rolled toward him with a smooth and unvarying width of what appeared to be about eighty feet—if the Martian were still five feet tall. It slid beneath his feet and receded into the opposite distance, like a long twisting roll of grayish dough. On either side of this hill ran a deep valley, funnel-shaped, and then came another identical hill, and so on, and on, and on....

It was as though he had been shrunk to the size of a Lunar micrognath, Smith thought and then been dropped onto a strand of spaghetti; and this strand was only one of many hundreds of similar strands, laid side by side, stretching to eternity.

Everywhere he looked about him rose strange irregular growths, some thin as matchwood, others thick as oak trees; leafless, branching, shooting madly hither and yon. They sprang from the gray soil and ended, not in space, but in the roof of this strange world of Marmalade. They were like fantastic upright pillars holding up the "sky"—a mucous-slick sky as gray and incredible as the soil itself.

The soil was not, however, a solid gray. All about, just beneath the surface, darted little networks of red—like streams of blood flowing everywhere, everywhere, to nourish this unbelievable land.

"Well, well," said Smith aloud. "I imagined that was it. He played me a joke, did he? A good one, too! Let me see." He thrust out a finger at the hill on which he stood.

"This is a sulcus. The valleys are gyri. These tree-things are the trabeculae, then; and I am standing on the piamater, beneath this roof of

the subarachnoid cavity of—"

smile.

"I WISH he'd come back, that's all," said D'Angaur. "I don't feel right about it. What if that trav of his just dumps him into a void someplace, or disintegrates? How do we know what it might do?"

"Oh, come," said Moleath jovially. "He's all right. It couldn't take him anywhere dangerous, because—well, because in the first place he was kiddin' us all along, and in the second place this Marmalade is nothing but a figment of my mind. So what's the harm?"

"Harm enough if he comes back with a Martian joke all cooked up, old friend. Their humor tends to be pretty violently physical."

"Oh, they love a joke on themselves. And he can't have come to harm, Robespierre. I tell you Marmalade exists only in—"

"Moleath's brain" finished the Martian, chuckling. "Here I am on a sulcus, which is about half an inch wide, so I suppose I'm no more than one thirty-second of an inch high.... And those trees, the arachnoid trabeculae, are in reality fibrous filaments about as thick as nylon thread....Hmmm! Well!" He took out a pack of Venusian under-liquid cigarettes and put one in his speech orifice. "If he will send me here, by Jove and by jackrabbits, he must stand a little heat!" He lit a magnesium-fylor superheat match, which burned up brightly even in the powerful glow of his floodlight, and lit his cigarette with a thoughtful

"Ouch!" said Moleath suddenly. "What's wrong?"

"Oh, I've got a queer sharp little pain in my head. Right up here on top."

"You're getting too old for the spaceways," said D'Angaur, shaking his head in mock sadness. "These long trips are too much for you."

"Ouch! It's like a flame in my skull!" said Moleath, ignoring the Frenchman's humor. "Like a blasted little flame, right up on top!"

"Yes," said Smith aloud, "I like it here. It's quiet, and safe, and there'll be nobody to bother me with interruptions. I think I'll stay here for the whole five-year term." He picked up the collapsed single-trav and thrust a hand into its transparent insides. "Let's see, I'll have to build myself a little cottage first. Shovel, please," he said into one of the dials, which had a tiny hole in it. "And in an hour or two, planks. Ah, thank you." A razor-edged spade had appeared in the trav. He brought it out.

"First I'll have to dig a foundation," he went on thoughtfully. "Not too deep—let's see, how thick is this layer? Thick enough to let me dig a nice hole without serious damage, I'm sure. Might be somewhat painful to his nervous system, but then—Marmalade, eh?" Complaisantly humming a Martian tune, he began to dig himself the foundation of a cottage here in this curious, solid-spongy, red-shot gray soil.

COMING NEXT MONTH:—

THE MAN WHO LAUGHED AT TIME

By ALEXANDER BLADE

A thrilling story of super-science! Be sure and reserve your copy now....

CENSUS PHOTOGRAPHER

By CARTER T. WAINWRIGHT

★ AS EVERYONE knows photographic mapping is a now established and accepted technique, being used on a large scale these days. It has many civil as well as military applications. Vast areas of a country can be accurately mapped by simply flying over those areas with suitable cameras. Scale distances can be maintained and a lot of wearisome foot-clogging can be avoided. Even now such an aerial survey is being made by many countries covering a good portion of the globe, including, of course, the United States.

Recently Popular Mechanics magazine reported on a novel trick involving a census of trees, making use of both such photography and some equipment consisting of a photo-electric cell. Previously in order to count the trees on a given acreage, maps, photographic or otherwise, would have their areas determined by tracing the outline of the tree-area, gridding it with a known scale-area and then adding up the results. This is tedious and time-consuming.

Some clever thinkers thought of scanning the areas with a photo-cell device which counts the trees in terms of the amount of light projected through the map and decreased by the tree density. This efficient scheme has eliminated a great deal

of labor.

Such uses of the photo-cell are coming more and more into prominence. This magazine has already reported on certain aids for the blind which involves such devices.

In statistical work, in census-taking, and elsewhere where data is preserved on cards or maps, photo-cells can be used as "eyes" to read the vital information.

The machine and electrical methods of scanning have proven invaluable. One of the first uses of automatic "scanning" was the simple electrical-contact corrector for students' examination papers. These gadgets have been improved too. We cannot reiterate too often that with the manifold possibilities offered by machinery and electronics, so many drab and tedious functions are being taken over, that men will soon have more leisure than they can use profitably! No one will quite believe that, but the science-fiction world of the robot is not a remote possibility; it is a reality. True the robots don't look like men, but they perform the same operations.

This is not as stimulating or alarming as it sounds—whichever way you choose to look at it—for things are so far in their infancy and human brains will still be at a premium for a long time to come!

THE ARCHERFISH

By L. A. BURT

MANY STRANGE creatures inhabit the seas, and the exploits and abilities of sea creatures are far too numerous to mention. But some of the more common varieties known to all of us are the sailfish, whose large dorsal fin resembles a sail on a fleet schooner, the swordfish, whose peculiar proboscis is used as an effective means of defense, and the electric eel, a creature capable of killing a human being with a lethal discharge of electricity.

These are all fairly common phenomena of the ocean depths. But there is one tiny creature whose talent is not so widely known. And that is the Archerfish, inhabiting the fresh waters of Java and other Indo-Malayan islands.

This curious little fish, not more than six or seven inches in length, can project a stream of water from its mouth for a distance of five or six feet. It utilizes this singular ability to "snipe" flying insects, wetting them, and knocking them into the water where the archerfish can consume them at its leisure. For its size, the archerfish has a singular accuracy that any bowman would be proud of. Truly, a William Tell of the ocean depths!

THE BEAKER FOLK

By JON BARRY

ONE OF the curious bits of history surrounding the British Isles concerns the prehistoric race of men that migrated to Britain, later to become known as Beaker Folk.

This name was eventually derived from the fact that these people buried their dead in round burial mounds, placing an earthenware drinking cup with the body, known as a beaker.

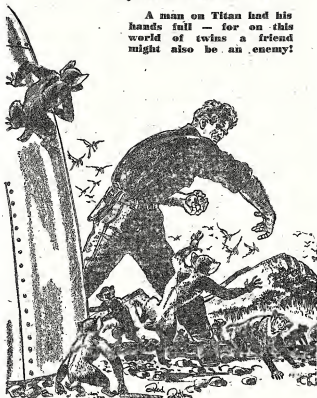
The Beaker Folk were tall, robust, and possessed the distinguishing characteristic of square heads. It is interesting to note that instead of their fame coming down through the ages with the stigma of "square heads" attached to them, they have instead, because of this peculiar burial custom, escaped a dubious distinction to become known as "The Beaker Folk."

Another curious sidelight on this race of men, is the supposition for many years that they were the first to introduce bronze into the British Isles. Some bronze implements have been found in their graves, true, but science has since advanced the theory that the Beaker Folk received the bronze from another outside source. Be that as it may, they already have their own niche in man's ever growing history....

TWIN SATELLITE

By GUY ARCHETTE

A man on Titan had his hands full — for on this world of twins a friend might also be an enemy!



The monkey-pups ran away, their chattering a din in his ears as he buried the rocks . . .

WITH AN air of finality, Dave Bradley tightened the last bolt on the outer shell of his prefabricated cabin and stepped back to obtain a more comprehensive view of the result.

For the dozenth time he over-looked the light Titanian gravity, and the movement, performed with artistic enthusiasm, carried him several feet through the air. When he came down, it was in the midst of a group of monkey-pups, who had been interested spectators of his labors. Dave Bradley went sprawling, and the creatures, a bizarre mixture of monkey and dog, ran in every direction, squealing in alarm.

"Damned pests!" Dave raged. "Go on, clear out of here!" He emphasized the command by scooping up handfuls of earth and hurling it after them. "The little devils are noisier than the animals they were named after," he muttered as he rose. "I'll have to build a fence if I want any peace."

"Damn, damn!" shrilled one mon-

key-pup from the convenient shelter of a bush.

"Pest!" added another.

In a moment it became a contest, in which each of the creatures sought valiantly to outdo the other in screaming out cuss words gleaned from Dave. The din would have made a meteor miner's eyes round with awe—and a meteor miner is celebrated for the size and expressiveness of his vocabulary.

The monkey-pups had vocal organs capable of reproducing human sounds, and since they were semi-intelligent, they used this ability to mischievous advantage. They were of a variety of shades between black and brown, and in addition to size and shape they had one thing in common—each had a twin.

Dave put his hands over his outraged ears and groaned. When the noise showed no signs of abating, he ran into the cabin and grabbed up his rifle. The surrounding vegetation quivered to the roars of the shots, and the monkey-pups scattered in



terror.

Dave glared after them wrathfully, plans of wholesale annihilation flitting through his mind. He sighed in despair. The whole darned satellite was crazy. If it wasn't the monkey-pups with their vocal imitations, it was the reflection-plants and the strangely real, almost mirror-like images they produced.

He had come to Titan for solitude and mental peace—but the monkey-pups destroyed his solitude, and the reflection-plants reminded him of Chuck, who reminded him of Madeline. And thus he was constantly reminded of the troubles he had come here to forget.

Dave thought 'lackly of the day Fate had decided to endow him with a brother—especially a brother who had turned out to be his twin. It had made certain aspects of life more difficult, and the difficulties had reached eple proportions when he and Chuck had fallen in love with the same girl.

Madeline was a television singer, and seldom had anyone more glamorous ever warhled a note. Dave and Chuck had met her at a party, with the result that both had developed a sudden and intense interest in the state of marriage. Madeline had seemed interested in return, hut a thorn in Dave's side had been the fact that she was too perfectly content with both of them. At last he had become disgusted with the situation and had told her that she must choose between Chuck and himself.

Even now he couldn't tell just how it had happened, but the first thing he knew he was one of the participants in a hot and noisy quarrel. Out of the welter of scathing words only one thing had been clear—Madeline had decided to marry Chuck. And carried on the tidal

wave of his hurt, and anger, Dave had quit his engineering job, gathered up his personal possessions, and taken a rocket to lonely Titan, determined to remain a hermit for the rest of his life.

DAVE SHOOK his head wearily, and leaned his rifle against the wall of the cabin. He began assembling the collapsible furniture, and when he had it arranged to suit him, he unpacked his belongings and distributed them about. By the time he was finished, the short Titanian day had ended. Without bothering to undress, he threw himself down on the bed.

The next day was already half over when he awoke, and he gulped down a hasty breakfast. He wanted to get the fence built as soon as possible. Strapping on a pneumatic pistol and carrying an axe, he started from the cabin.

At his appearance outside, several pairs of monkey-pups darted into the surrounding vegetation. Dave glanced around quickly, then swore. The creatures had made attempts to dig under the metal walls, and the encircling soil was dotted with their tracks. A horde of monkey-pups had obviously visited the cabin during the night.

"I'll soon fix that," Dave growled. He started toward the forest beyond the valley in which his cabin was situated. Choosing small trees of approximately the same thicknesses, he cut them down with powerful blows of his axe and piled them together. When he judged that he had enough, he gathered all that he could hold—which was a lot, considering Titanian gravity—and carried them to the cabin. Several trips sufficed to get the load of posts piled up near the little dwelling. By that time it was

night again.

Dave got out a florolite lantern and set it up where he could work in its illumination. He cut the tree trunks to a uniform length of eight feet, then trimmed the tops to a sharp point. As usual, a small crowd of monkey-pups were enthralled watchers. But more than Dave's labors, the florolite lantern fascinated them. They speculated over it in shrill tones.

One set of twins even went so far as to make an attempt to steal the lantern. But Dave noticed the wavering of the beam in time, and at his outraged bellow they dropped it in panic.

"Little devils!" Dave muttered savagely. "If this fence doesn't keep them away, I swear I'll hunt down every last one of them and blow them back to hell!"

Carrying the lantern, he marked a rough circle in the soil with the axe. Then he obtained a spade and dug a shallow trench around the line. After a moment a muted thunder came to his ears, and he glanced skyward in time to see a rocket go flashing by, its exhaust trailing out like a tail of fire behind it.

"Another sap who thinks he's found the promised land," Dave decided. He shook his head in sympathy, and keeping a wary eye on the monkey-pups and the florolite lantern, began erecting the fence.

When day burst abruptly upon the satellite again, the job was finished. A gate was yet to be made, but Dave was too tired even to think of beginning work on one. He piled several empty fiber crates against the opening in the fence and braced them in place with a few of the left-over posts.

Finally he staggered in to bed. The frustrated howls of the monkey-

pups as the meaning of the fence dawned upon them was like music to his ears.

SEATED in the midst of numerous boxes, barrels, and crates, Chuck Bradley was gloomily contemplating the Titanian landscape in the immediate vicinity of the spot where the rocket ferry had set him down. He felt a sad satisfaction at what he saw. Titan was just what it was reported to be—a wild and lonely place. And right now there was nothing more Chuck wanted than solitude.

With the sudden and unexplained disappearance of Dave, the road to marriage with Madeline had seemed clear. Then in had stepped Mortimer Eustace Van Epp, to whom Madeline had been introduced at the television studio. Van Epp was a playboy on the bad side of fifty, and had been divorced more times than anyone could remember. Certainly there had been nothing about his looks or personality to recommend him to a girl as wondrous as Madeline, but Mortimer Eustace Van Epp had been blessed by an enterprising space suit manufacturing father with more money than he could possibly count.

And Madeline, whose secret hobby was counting money, had immediately deserted Chuck in favor of Van Epp. She had, in harsher language, presented Chuck with the toe of her dainty plastolon shoe. Now she could look forward to a short and unhappy marriage with Van Epp—and a sizeable slice of alimony at the end.

But Chuck could look forward only to a life from which every prospect of happiness had fled. And as a result he had been seized with a sudden desire for isolation. Titan had seemed a perfect refuge, and he had embarked for it with the solemn

determination to remain a hermit for the rest of his life.

During the long voyage Chuck had whiled away the time in a study of Borland's "Flora and Fauna of Titan", and so he knew just about everything there was to know about the satellite. He had his solitary existence all planned out.

As soon as he found a suitable location near a source of water, he intended to set up his prefabricated dwelling. Then after he had settled down, he would begin planting quillipods, which were valuable on Earth for their medicinal properties. And when the crop was coming up nicely, he would begin trading for fungus-pearls with the Titanian natives, intelligent creatures who were startlingly similar to the American black bear of Earth. Fungus-pearls commanded a large price and would offset any losses in his quillipod crop.

Considered as precious jewels by people wealthy enough to afford them, fungus-pearls were solidified excretions of a rare and curious type of mushroom which grew in the Titanian forests. The natives—or Glaths, as they called themselves—knew just where to look for them, and since Chuck had a large supply of fascinating trinkets, trade would be brisk and lucrative.

Chuck took a deep breath and stood up. There was a lot of work to be done. First of all, he had to find a location for his cabin.

He rummaged among his possessions until he found the box that contained the packages of concentrated food rations. Stuffing a couple of the packages into his pockets, he picked up his rifle and set off into the forest a short distance away.

Titanian vegetation, he happened to think of how out of place Madeline would have been here. He was passing a clump of reflection-plants when the picture of the girl formed in his mind. Suddenly he froze into immobility, staring with disbelieving eyes. Before him, smiling and lovely, stood Madeline!

For several incredulous seconds, Chuck gaped at the vision. And then he remembered and brushed a hand across his eyes. When he looked again, the girl was gone.

"Reflection-plants," he muttered ruefully. "I should have known right away."

He had read about them in Borland's book, of course, but had thought the account somewhat exaggerated. It had taken first hand experience with the uncanny plants to convince him.

According to Borland, the plants caused the visions by means of an odorless gas that they emitted when anything approached. This gas had drug-like properties and affected the mind in such a way that one seemed to see an amazingly real and life-like image of whatever he happened to be thinking about at the moment, superimposed against the reflection-plants. The plants were carnivorous, and since they were unable to move about, this ability enabled them to obtain food. In seeking food of their own, small animals would be affected by the gas and would be deceived into thinking they had found what they were after. When they went to get it, they were captured and gobbled up by the reflection-plants instead.

The plants looked like nothing so much as two feathery and vividly-hued octopi on long stalks projecting from a single thick trunk. They were the Siamese twins of Titan.

AS HE STRODE along through clear lanes among the weird

Chuck continued on into the forest with a mental note to keep a sharp watch for any other reflection-plants. One dose, he thought, was enough.

Into his path suddenly appeared two monkey-pup twins. He regarded them with interest, and then he burst out laughing as their incongruities struck him.

"Smoking rockets!" Chuck gasped. "I've never seen anything so funny in my life!"

"Pest!" snapped one twin.

"Little devil!" added the other.

Chuck stared, his mouth open. The two monkey-pups began speaking at at some length. Their vocabularies were expressive and seemingly inexhaustible. The air turned a figurative blue.

Out of breath at last, the two went off—but not without a parting shot.

"Damned smoking rocket!" they chorused in unison.

A look of stark astonishment on his face, Chuck watched them disappear into some bushes. Then he began laughing again. He dropped his rifle and doubled up with mirth, tears streaming down his cheeks.

"Oh, Lord!" he wheezed. "I wonder where they learned all that? Whoever taught them certainly did a beautiful job! Kind of reminds me of Dave when he got mad. Dave got a lot of experience in plain and fancy cussing from bossing that thick-skulled construction crew of his."

He picked up his rifle, wiped his cheeks, and set out again. He was thinking about Dave. He had been too occupied with his troubles to think of Dave before, but now he wondered what had become of him.

tree trunks that remained from building the fence. He decided that there weren't enough to make a gate with, and made quick preparations. Climbing over the obstruction of boxes in the fence opening, so that he wouldn't have to remove them and thus let the monkey-pups in, he headed once more for the forest.

As he went, a group of monkey-pups screamed villification at him. They didn't like the idea of the fence, and they weren't hesitating to let him know it. Dave protruded his tongue mockingly and thumbed his nose.

"I've fixed your clocks!" he grunted in satisfaction.

In the forest Dave found that he had cleared a considerable area of the diameter of tree trunk he wanted and that it was now necessary for him to penetrate further inward if he wished to find any more. This was not to his liking, for it was deep in the forest that the reflection-plants grew, and he didn't relish the thought of an encounter with them.

But the issue could not be avoided, and he continued on, deeper into the lush growth. At intervals he found the sort of trees he sought, and he cut them down swiftly, placing them where he could easily locate them when he was finally ready to gather them up and return to the cabin.

It was while engaged in doing this that Dave came upon Chuck.

The ship Dave had seen while building the fence had landed just beyond the forest. But Dave hadn't known that, since sound didn't travel very far in the thin Titanian air.

And the presence of Chuck upon Titan was the last thing Dave would have expected. Ditto for Chuck.

Both looked the same, for they were twins. Both were dressed the same, for they were romanticists

DAVE had just finished breakfast and was studying the supply of

at heart and had adopted the usual frontiersman's costume—synthetwool breeches tucked into plastolon boots, a neosilk shirt under a short jacket, also of plastolon, and a cap with earflaps that could be folded up when not in use.

And both had a healthy respect for the reflection-plants.

Dave stared at Chuck, and Chuck stared at Dave. Then Dave winced and closed his eyes. Chuck scowled and closed his eyes. Shaking their heads, they turned and strode off in opposite directions.

"Blasted reflection-plants!" Dave thought bitterly.

"Reflection-plants again!" Chuck mused in disgust.

CHUCK shoved his hoe into the soft earth and painfully straightened his back. He gazed proudly at the field of quill-pod seedlings, which were pushing their yellow-green tips through the soil. His three Titanian months of work were beginning to show results.

He'd have a fine crop, he decided—or rather he hoped he'd have a fine crop. He had followed the instructions in the astro-agriculture textbook carefully, but he had learned that the best-laid plans of mice and men often backfire.

Suddenly Chuck's face brightened. Two Glaths had appeared from the forest bordering the field and were coming toward him. Twins, as usual.

"Funguth-pearlths!" lisped the first Glath. It was because of this peculiarity that men called them Lispers, and Chuck thought of them by that name himself.

The Lispers were about four feet tall, and their appearances reminded Chuck each time he saw them of the black bears he had seen in zoos on

Earth. But their muzzles were shorter and their limbs longer and straighter, adapted to walking upright. Their fingers and toes were prehensile rather than clawed. And like the mischievous monkey-pups, they had vocal organs capable of imitating human sounds—except for the fact that they lisped.

"Fungus-pearls?" Chuck said eagerly. "Smoking rockets! Let me see them—quick!"

"Twinkets?" asked the second Lisper, who evidently had a cautious streak.

"You can het your hide on that!" Chuck returned. "Here, hand them over."

He examined the two fungus-pearls which were placed in his palm. They were small ones, but there being two of them made up for that. They were a creamy white in color, and were all the more beautiful for the faint streaks of pink that radiated through them. Altogether, Chuck had five now, and he already considered himself a rich man.

"Twinkets?" said the Lispers, eyes glistening.

Chuck nodded and led them to his cabin—also fenced in to keep away the monkey-pups—and produced his chest of trinkets. Word of that chest had gotten around the Lispers, and its contents were considered a treasure trove. An envied pair of Lispers were the ones who had mirrors, or sported bright head necklaces.

While the two Lispers mulled avidly over the contents of the chest, Chuck placed the two fungus-pearls in a small box with the other three, and hid the box carefully in a trunk. He'd look at them again later, but right now he had to keep an eye upon the two Lispers. Temptation was universal.

Chuck watched them, grinning in sympathy. Their features were studies in painful indecision, and their paws hovered yearningly over the different objects. At last the two made their choices and trotted away quickly to show off before their comrades.

Closing and replacing the chest, Chuck returned to the quill-pod field. He took up the hoe once more and piled it industriously, humming as he worked.

This was life, he told himself. He was glad now that he and Madeline had broken up. He knew, if he had married her, that she'd never have agreed to an existence of this sort. She loved the gay parties on Earth too well. He thought with relief of his narrow escape.

DAVE was lying in a crude hammock he had made, with his hands pillowed under his head. He could afford to take it easy now, for his quill-pods were coming along nicely, and there was nothing more that needed to be done for the time being. Though he was reluctant to admit it, he was beginning to feel the pangs of loneliness.

He rolled out as two Lispers appeared at the open gate. They came forward solemnly.

"Funguth-pearl!" said the Lispers.

Dave's eyes widened. He held out his hand. "Let me see it!" He whistled softly as he looked at the jewel. It was a large one, flawless in its glistening beauty.

"Get twinkets?" one of the Lispers asked.

Dave nodded quickly. "Yeah. Wait a minute." He went into the cabin and rubbed his jaw indecisively. What in the world was he going to give them? Too bad he hadn't foresight enough to bring a case of junk

jewelry along.

Some hasty rummaging among his possessions brought to light a garish necktie, an empty but glittering cigarette case, and a bracelet he had once intended to give Madeline. To this he added an alarm clock, which, since it kept Earth time, was almost useless on Titan. He hoped that the Lispers would be satisfied. Everything, except what he really needed, was already gone, and these articles were all he had left. But the fungus-pearls were worth it, since the price he'd receive for them would make up many times for what he had given away. He had three now, and this last would make the fourth.

Dave spread the articles before the Lispers and waited as they made their choices. His face wrinkled in a frown of thought. He couldn't understand how the Lispers had come to him in the first place. Certainly, trading for fungus-pearls had been farthest from his mind when he had shipped for Titan.

It had all started when a set of Lisper twins had come pounding on his gate, extended a large fungus-pearl, and asked for trinkets. Several Titanian days had passed before he got over the shock, and a short time later he had been shocked again.

But he liked it.

Had he known of Chuck's presence on Titan, all would have been instantly clarified. Directions meant little or nothing to the Lispers, and since Dave and Chuck looked the same—even to cabins, fences, and quill-pod fields—they were the same person to them.

Finally the Lispers made up their minds, taking the bracelet and the alarm clock. Dave hid the fungus-pearl with the others, then placed the tie and cigarette case where they would be at hand for future

transactions. He returned to the hammock and stretched out with the air of a wily stock operator who had just cornered the market.

"Why, bello!" a voice said.

DAVE looked down at the open gate, expecting to see the leering features of a pair of monkey-pup twins. But he didn't see them, or anything even approaching them.

He was looking at a pair of slim legs, clad in synthewool breeches and dainty plastalon boots. And as his gaze moved up, he saw a hooded surcoat, trimmed with fur, and within the hood curling light brown hair, framing a small vivacious face.

The face of a girl.

Sight of a man here on lonely Titan would have been surprising enough to Dave, but a girl—and a pretty one at that—left him speechless with amazement. For a moment he could do nothing but stare. Then he realized abruptly what a fool he must look and started to roll out of the hammock. But in the stress of circumstances he forgot the proper method and went sprawling to the ground.

The girl's laughter pealed merrily as Dave scrambled to his feet, red with embarrassment. He had further difficulty in getting his voice to function.

"Sorry to have startled you," the girl said. "I know what a shock it must be to meet one of your own species here on Titan."

"Especially a girl," Dave added. "For a moment I thought a reflection-plant had gotten me. Then I remembered I'd never seen you before, and so could have no image of you in my mind. My name is Dava Bradley, and I'm a quill-pod farmer with a dash of the trader on the side."

"I'm June McElroy, one of the daughters of a man who has a dash of the slave driver in him." She laughed at the use she had made of Dave's words, and he grinned with her. "In other words," she continued, "my father is a mine operator. He and his crew are working a mine about two miles from here. Didn't you know?"

Dave shook his head. "Never even guessed. What is it all about? I haven't any news and haven't done much exploring."

"You've certainly been buried! You see, vulcanium was discovered recently here on Titan. A boom town has sprung up near the scene of Clarke's Landing, named Hallville after the prospector who made the find. My father's outfit came over from Europa. He brought us along. He didn't want to, but we made him."

"We?"

"My sister and I. We finished college a short while back and wanted to do a little roughing it by way of a vacation."

Dave learned a number of other things about her, and then somehow he was talking about himself. June McElroy was such a good listener, and he found it such a relief to be talking to someone after his months of solitude, that he was soon telling her of his trouble with Madeline. The girl was sympathetic and agreed that Dave had done the right thing. By that time they had a warmly intimate feeling toward each other and were using their first names.

It was June who realized the swift passage of time.

"Oh, but its growing late! I'll have to return to the camp before night. I can brave the forest in the daytime, but at night my courage deserts me. What if I happened to

be passing a reflection-plant and thought of ghosts?"

"I can imagine!" Dave grinned. "But I'll be glad to walk you to your father's camp, June."

"Your offer accepted with thanks," she replied.

NO MILES ever seemed shorter than the two Dave walked with June McElroy. He found himself wishing that she lived further away.

"Why not come into camp and meet my father?" June asked, when the mine buildings were finally in sight.

"I'd really like to," Dave said. "But I'm afraid I'll have to get back to my cabin. I forgot to lock the gate, and by now I suppose a mob of monkey-pups have invaded the place."

June made an obvious effort to conceal her disappointment. "Then could you come to dinner—say, about two days from now? That corresponds to our Sunday, and father won't be working. In the afternoon would he about right?"

"I certainly will. And I'm warning you that I'm going to make a pig of myself. As a cook I'm a good—quill-pod farmer."

The girl laughed. "I won't be too critical of your eating habits, then. The cook we have at camp is good—even admits it himself.... Well, good-night, Dave."

He nodded wistfully. "Good-night, June."

He watched her until the shadowed vegetation hid her from view. Then, at a trot, he hurried back to his cabin, mentally estimating the amount of damage that might have been done by the monkey-pups while he was gone. There was a warm place where his heart had been.

June burst in on her father with

an abruptness that made him choke on the mouthful of coffee he had begun in the process of swallowing. He coughed, recovered, and made an effort to look stern.

"**W**HERE IN space have you been? I was starting to get worried."

"I was just exploring a little, Dad," she replied soothingly. "And I met the nicest man! He's a quill-pod farmer, and has a small place beyond the forest. I've invited him for dinner Sunday. You'll like him."

"Seems to me that you and your twin sister can find men wherever you go," John McElroy grunted.

"Where is May?" June asked, glancing at the table. She noted that May's plate had not been used.

"I'd like to know myself," McElroy gestured with his coffee cup. "You can't expect me to keep tabs on you two and run a mine at the same time. May told me she was going to look for you, and that's the last I've seen of her. No doubt she's found a man, too."

June pinched his cheek and then sat down to eat. Later, crossing the camp to the cabin she shared with her sister, she stopped at the sound of May's voice. She glanced around quickly, and then her eyes widened.

It was night by this time, but numerous floodlights made the area about the camp almost as bright as day. Thus June knew there could be nothing wrong with her eyes. She was looking at the very same man who had just walked her home! And he was with May!

Quick tears stung June's eyes. So that was why he had said he wanted to return to his cabin instead of coming into camp. He had gone to meet May. The black-hearted brute! June told herself she would never

speak to him again.

"Oh, June!" May called out. "Where are you? I want you to meet Mr. Bradley."

June bit her lip and drew deeper into the shadows where she stood. How could he stand there, waiting to be introduced, when he had already met her? Abruptly she whirled and ran into the darkness beyond the floodlights.

"I can't find my sister," May McElroy told Chuck, when she returned after a short search. "But here is my father. Dad meet Chuck Bradley. He's a quill-pod farmer and does some trading on the side. I happened to stumble across his farm by accident, while looking for June."

John McElroy grinned and pumped Chuck's hand. "So May has found a man, too, eh? My daughters seem to have a special knack for that. Stay for dinner?"

"Wish I could," Chuck said. "But I didn't arrange my cabin for a leave and ought to go back to keep an eye on things. I just came to see May come safely."

"Well, then, why not come for dinner two days from now?" McElroy suggested. "June has a friend coming herself."

"I'll be glad to," Chuck said. "Thanks, and good-night."

"Good-night!" May and her father returned.

"He's marvelous!" May breathed, when Chuck had gone.

"Seems that June has found a boyfriend, too," McElroy said. He told her what he knew of the matter.

"That's hitting on all jets!" May laughed. Then she sobered. "But where is June?"

McElroy shrugged baffledly. "She must be around somewhere."

May went in to eat. Later she found June in the cabin they shared

together. June seemed to be sleeping, but May shook her into attention and began eagerly to regale her with the story of her meeting with Chuck.

"I am not the slightest bit interested," June broke in coldly. With that she turned her back on the bed and to all appearances became a Martian mummy.

Puzzled and hurt, May prepared for sleep. She couldn't understand June's attitude. It couldn't be jealousy, for June had apparently found an interesting young man as well. Then what was wrong?

THE SHORTNESS of Titanian days was something Dave had often cursed, but now he found himself cursing their length. It seemed that the day on which he was to have dinner with June and her father would never come.

He walked the area about his cabin until he wore several different paths in the ground. He got his best clothes out of the trunk and meticulously dusted and pressed them. And during the time that remained, he lay in the hammock and thought of all the brilliant and witty remarks he was going to make at the table.

At last the fateful day arrived. Dave dressed carefully, then locked up the cabin. As he came out of the gate, a group of monkey-pups howled and bolted at sight of him in the unfamiliar clothing. Dave ignored them, as befitted a dignified gentleman of fashion. Securing the gate, he walked briskly into the forest.

When Dave reached the mining camp, he saw the figure of a girl come walking to meet him. He recognized June—or thought he did. She was wearing a gay neosilk dress which brought out her prettiness in

a way that had only been hinted at by the breeches and surcoat she had worn before. Dave felt suddenly awkward under her smiling gaze as he approached.

May had been waiting a little anxiously. She had begun to fear that Chuck wouldn't come.

"You're a little late," she chided teasingly.

"I didn't want to be too early, June," Dave said, with a grin. "You remember what I said about making a pig of myself. If I came too early I'd really look—" He broke off at the curious change of expression on the girl's face. Her lips were trembling and her eyelids were blinking rapidly in a futile attempt to keep back tears.

"Why, June!" he gasped. "What is the matter?"

This second repetition of her sister's name was like a twist of the knife which May felt had been plunged into her. The two-timing scoundrel! So *that* was why June hadn't spoken to her for the past few days! June had known him all the time, but had kept it a secret to avoid competition. And finding her secret was out, she had acted like a petulant child out of sheer spite.

But more than that, Chuck had never once mentioned that he knew June. He had been just as willing to keep their acquaintance hidden. May came to the humiliating conclusion that she had been used for a fool.

"June, what—"

"Don't speak to me, you brute!" May cried. Whirling, she turned and ran, sobbing.

Dave stared after her, utterly bewildered by what had happened. June had looked for all the world as though he had slapped her in the face. What could he possibly have done to hurt her?

"Ah, there you are!" a hearty voice said.

Dave turned to see a robust, gray-haired man approach. Who was this, he wondered.

"Hope I haven't kept you waiting long," John McElroy said. "But you should have come right up to the main cabin, Chuck. We aren't much on formality here."

"I beg your pardon," Dave said. "My name isn't Chuck."

"Eh? That's what May told me."

"May? I'm afraid I don't know anyone by that name. And might I ask who you are?"

McElroy frowned a moment, then threw back his head and laughed. "You youngsters! Always kidding! Well, if you want to pretend you weren't introduced to me two days ago, I'm willing to play along."

"But I wasn't here two days ago," Dave answered in growing perplexity. "What is this all about anyway?"

McElroy scowled. "A joke's a joke, but this is going a little too far. Of course you were here two days ago, I saw you just as plain as I can see you now. Even shook hands with you—though right now I'm wondering why I bothered."

Dave's patience, already strained by the incident with May, was beginning to crack. "I'm sorry, but I never saw you before in my life!" he snapped.

"All right—you can have it that way, if you insist on it," McElroy drew himself up grimly. "And as far as I'm concerned, that dinner date is off. You can go, young man!"

Not trusting himself to say another word, Dave stalked off. What a fine ending for all his hopes and plans! Snubbed by June and insulted by her father—the identity of the latter having just become clear. What had gotten into them? He felt

positive he had said nothing offensive where June was concerned. As for her father insisting he had been at the camp before, he knew very well he hadn't been. The old man evidently had a jet or two missing.

Dave shook his head morosely. Women caused nothing but trouble. From now on, he told himself, he'd stick close to his farm and not have another thing to do with them.

June crossed the camp toward the main cabin, her forehead puckered in a wondering frown. May had just come running into their room, sobbing and refusing to volunteer an explanation. June intended to ask her father what the trouble was.

"May! Hope I'm not late."

June turned to see Chuck come striding toward her. She stiffened angrily. He had called her May, the beast! She knew him in his true light now.

"I'm sorry if I kept you waiting," Chuck said.

"No, indeed," June returned icily. "I'm the last person in the System who would be waiting for you."

CHUCK STARED, his features blank with shock. "May, what—what—"

"Don't call me May! I've found out all about you and my sister—and I'm through with you!" June tilted her small chin, glared devastatingly, and swept away.

Chuck scratched the back of his neck in baffled distress. What in the world was the matter? Why, he had never met May's sister!

And then the wrathful figure of John McElroy appeared. McElroy had heard the voices and had come to investigate.

"You!" McElroy snapped. "What are you doing back here? Didn't you hear me tell you to go?"

"But...but I just came!" Chuck said. "You didn't tell me anything—"

"I," McElroy said with terrible solemnity, "have already taken more from you than any man could stand." He began rolling up his sleeves. "Now I'm going to give you three seconds to clear out of here. If you're not gone by then, I'm going to break every bone in your body!"

Shaking his head in the manner of one who has witnessed the starkly incredible, Chuck turned and plodded away. Nothing made any sense. It seemed that everyone on Titan—or those at the mining camp, at least—had suddenly, and for no apparent reason at all, gone completely mad.

Chuck stumbled and bumped through the forest. He walked without paying the slightest attention to where he was going. He wasn't aware that his steps were taking him a considerable distance from his little farm.

Once he paused to glance dully about him. He saw a cabin with a field of bright quili-pods almost directly ahead. Taking for granted that they were his own, he lowered his chin to his chest again and continued on. The cabin was the only comfort he had left. No woman would ever again entice him away.

PRESENTLY he reached the fence around the cabin and pushed open the gate. He wondered how the gate had become unlocked, but he didn't care. Nothing mattered anymore.

He wasn't even surprised when he saw a figure seated in the doorway of the cabin. The other held a bottle in one hand. When he saw Chuck, he raised the bottle quickly to his lips.

Chuck nodded bleakly. "That's me

in about one minute," he muttered. "The reflection-plants seem to have developed a new technique."

There was a gasping sound. "It talks!" the figure in the doorway exclaimed. "What will those blasted reflection-plants be doing next? Or is it the whiskey?"

"I'm not an illusion of any reflection-plant!" Chuck snapped. "Of course I talk."

"You just have to be an illusion," Dave insisted. "I know I'm real, so you can't be."

"And I know I'm real. We can't both be real, unless—hey!" Chuck yelled in sudden realization. He had found the answer to the strange behavior of May and her father. It explained everything.

But it was too incredible to believe. It was impossible!

Chuck walked forward slowly and reached out a hand. He had to find out whether the image was real or not, or think he was going insane.

He caught the other by the shoulder. And his hand held something. It was actually a shoulder!

"He's real!" Chuck yelled.

Dave dropped the bottle he was holding, and whiskey gurgled over the ground. His face was pale. His eyes stood out like toes out of worn socks.

"Ch-Chuck?" he whispered. "Is... is that you?"

"Dave!"

The monkey-pup twins who happened to be peering through the gate at that moment were treated to an

unusual sight. It was that of two grown men, pummeling each other and shouting at the top of their lungs.

All doubts now gone, Dave and Chuck settled down to the business of learning each other's movements from the time they had been together last, to the present. Dave produced another bottle so that the conversation would be facilitated. It was his cabin.

Some time later they knew all there was to know regarding their individual adventures, beginning with Madeline and ending with May, June, and John McElroy. Dave threw the empty bottle at the two monkey-pups in the gate. The creatures fled, but returned a moment later to carry away the bottle and sample what remained of its contents.

"Well, the mystery is cleared up," Chuck said. "It was simply a case of mistaken identities. The girls thought we were the same person, since neither of us knew the other was here. And we thought the girls were the same person, since they forgot to mention they were twins."

Dave rose to his feet. "It's not too late to patch things up with the girls. We can talk, can't we?"

"Yes, but—"

"Then we can explain about the mix-up. Come on, let's go."

"You're right!" Chuck grinned, bounding erect. "Lead on, brother, lead on!"

THE END



ABRACADABRA



ABRACADABRA is quite a long, queer word, but one that we have all heard many times, especially from small boys and girls who are pulling some magic trick. It is a magical formula used by the Gnostics of the sect of Basilides in calling the aid of the helpful spirits in the fight against disease and misfortune. This word has been found on Abraxas stones which were worn

as amulets. A Gnostic physician, Serenus Sammonicus, gave particular instructions as to its magic use in curing illa, and his words spread beyond the Gnostics into modern times. Now days the word is used playfully by children and is applied contemptuously to complicated, unscientific theories.

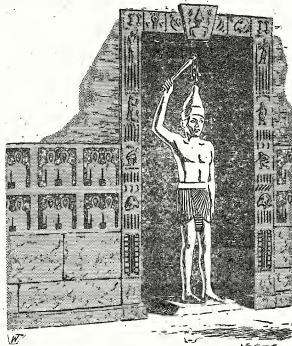
.....Sandy Miller

• • •

The EYE of the WORLD

By Alexander Blade

Men had failed to thwart the plans of the evil SCRAVVZEK, because all men were slaves to its power — all, that is, but one

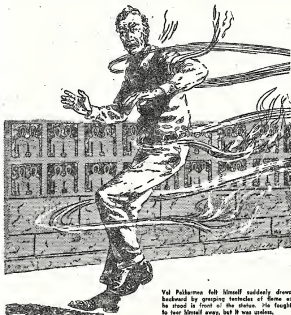


2-Part Serial — Conclusion
SYNOPSIS OF PART I

ALLAN BURGESS' thoughts were haunted by the memory of losing eighty men on an African expedition. He knew that every one of them had been killed, he had seen them die himself. But then he met a strange woman, Madame Lasanda, who seemed to have the strange ability to not only read his mind—but

also the past and future. It was Madame Lasanda who convinced Allan Burgess, much to his horror that the eighty men he thought had been killed were in actuality still alive—held captive by a terrible power deep within an immense mountain from whose side glistened a brilliant jewel—the eye of the world.

Burgess decided to return to Africa to solve the mystery, for he knew he would never rest until he found out if what Madame Lasanda had said



Vol Palmeren felt himself suddenly drawn backward by grasping tentacles of flame as he stood in front of the statue. He fought to tear himself away, but it was useless.

was true. He met, seemingly by accident, Sue Carson, famed as the "Yippee" girl in the entertainment world. Burgess, along with his close friend, Jimmy Ruggles, commandeers her private plane, and with the girl aboard, takes off for the Dark Continent.

They finally reach the great mystery mountain with its jewel eye staring out over the world, and Burgess leaves Jimmy and Sue in the ship and parachutes down to the mountain.

He finds a weird world inside it, and to his astonishment, finds his men still alive, recruited as guards for an evil power that calls itself the Scravvzek. This dread power speaks through the lips of a famed scientist who had vanished from America, a Dr. Val Pakkerman. Burgess secretly adopts the roll of one of the members of the guard and vows to subdue the power that threatens to engulf the world.

In the meantime, Sue Carson and Jimmy Ruggles have landed the ship and returned to the mountain on foot. In the company of a native boy, known as Buni. They also get inside the mountain, and after a perilous scrape with the guards, meet up with Allan Burgess once more.

Back in America, Madame Lasanda is shown to be a mystery figure, wielding fingers of influence for investigation of the mystery mountain for purposes that only she is aware of. She, in the company of certain political figures, is conspiring for the fate of the world.

As the first installment ends, Burgess, back in the mystery mountain, has seen finally, Val Pakkerman, the famed scientist, and the terrible force of the Scravvzek ruling through the scientist's body. You can pick up the story now as Allan, Jimmy, and Sue

are traveling on the glide-walk and discussing the evil Scravvzek. Allan is worried, saying:



"We'd better do a little praying of our own," Allan said a moment later. A patch of light had appeared. The glide-walk would coast through it soon. It was a good time to be on the alert. One never knew when the other dwellers of these caves might step aboard the walk.

THE LIGHT passed over them. They got a fleeting sight of an opening that led down an incline toward one of the cavern rooms Allan had seen before. There were no signs of Green Coats or White Sharks. Traffic was light at this hour. Allan knew that Sully's staff must still be resting.

Jimmy, who had been over some of this ground before, now observed that this was the path he had taken back to the Glass Arena after his first runaway ride. The glimpse also revealed a return walk above their heads. The track and rollers were visible. The walk was gliding along in the opposite direction from their own. This answered a question that had been heckling Allan ever since they boarded. He couldn't conceive of all the traffic flowing in one direction only, unless a man's trip to the Black River and beyond was to be his last and final journey.

The discovery of the return walk overhead also served as a warning to keep their voices low. A man might be crossing over them at any time, catching snatches of their conversation.

A few more openings into the

brighter caverns swept by. They saw a spacious kitchen, where a few Rocky Chests were busy stirring soup and slicing long loaves of brown bread. They caught sight of a garment factory of sorts. A white Shark was counting a batch of new uniforms, and three of his assistants were bringing out armloads of new garments.

"There's strategy for you," Allan commented. "Sully has taken a beating, and his ego has suffered. He needs a facelifting in the eyes of the others. So he's passing out a few favors to get himself back on the pedestal. Fresh uniforms. We'll see more of those."

"An' we better see them before they see us," Jimmy added.

After another interval of darkness, their rolling walk brought them alongside a wide underground river.

The dark ceiling that arched over the water emitted a faint purplish light. The waters could be seen, flowing swiftly, rippling with nervous lines of dark blue and purple. So this was the Black River, a sort of dividing line.

"It was along here that I first saw Pakkerman," Jimmy declared, trying to look around the curve ahead.

"I thought you got off at the stop back yonder."

"I first got off somewhere up ahead—I think," Jimmy added, slightly dizzy over it all. "Then I must have got on the return walk above us for part of the trip back. Or else this thing goes in circles."

Sue declared, "I've been going in spirals ever since I boarded. Doesn't anyone ever come around to take up tickets?"

"It's a lotta free ride, whether you come or go," Jimmy said. "Who d'ya reckon ever set this business up in the first place, Captain? You know Sully

wouldn't have the know-how for a job like this."

Allan knew that Sully and the crew had nothing to do with it. The power of the Scravvzek had been applied here. The black tunnel, the grading along the bank of the Black River, and the short low bridge that now loomed just ahead—these were evidences of a power that could move mountains with magic fingertips. Obviously, the walk wasn't being overburdened with traffic these days. But it may have been in operation through many husier years—or centuries—who knew?

Now they were gliding across the bridge. The return walk was visible over their heads. And a few feet higher, the arched ceiling over the river could be seen.

ALLAN reached down over the edge of the walk and managed to touch the surface of the water. Warm, swiftly flowing. Rippling with blue light. And rather inviting, he thought. If he hadn't had more urgent business ahead, he'd have been tempted to stop for a swim.

He wondered about the river's elevation, as compared with Bunjojop Lake. He felt sure that the glide-walk had taken them many feet downward since they had come away from the Red Room.

The gliding walk carried them into another black tunnel whose narrow walls were close enough to bump Allan's elbows if he wasn't careful. The river was left behind. Again pitch blackness.

"Still there, Sue?"

"Present."

"Scared?"

"A little," said Sue. "I keep thinking, how do we know but what this walk will pitch us over a cliff sooner or later. When it gets too black to see

anything, how do we know but what we'll drop into a hopper that will grind us into hamburger or something?"

"Hamburger!" Jimmy gasped. "I'm so hungry I'm about to faint. When do we eat? If ever."

Sue shuddered. "I can't stand conversations that end on *if ever*. As long as we have this lunch that Gallagher packed for us, we can't start starving. Why don't we eat, Captain? I don't want Jimmy to faint here in the dark. He might roll off the glide-walk."

"Yeah, an' five miles later you'd miss me."

Farther on, they found a lighted station of sorts. It was one of the thousands of rambling caverns, but it was brightly lighted and furnished with a bench. And there was drinking water.

While Allan and Jimmy speculated over the distance they had come, Sue spread the lunch. She sniffed to discover that Gallagher had included a bottle of liquor. She promptly discarded it.

"The banquet is served, gentlemen. Fall to."

Allan wished there was some way to employ a guide. He wanted some assurance that they were going in the right direction. He had begun to fear that they might have passed the "mirrors of the world" somewhere in the dark.

"Here comes a guide now," Jimmy whispered. His sharp ears had caught the sounds of voices approaching. "Now I wonder who—"

"Back into the shadows!" Allan commanded. "It's someone on the glide-walk. Maybe a search party. Hide! Take no chances!"

Sue picked up the lunch things like lightning. Jimmy accounted for two sandwiches in the scramble for cover.

Allan gathered Sue and Jimmy back into a shadowed passage and there they waited, huddled close, as the voices approached.

CHAPTER XXX

IN HER studio in the Garmond Building, Maple City, U.S.A., Madam Lassenda raised her heavy eyelids. It must be growing late. She was sitting at her table. A cup of tea rested by her hand. She took a sip and found that it had grown cold. She must have dozed.

Before her eyes the copper statue stood, lighted. Mysterious little Ksentsajboa! He was waving his arm, and the rhythmic light was coming and going from the base upon which he stood. Patient little fellow. Wave after wave after wave.

Of course, he was always there. Always ready to serve. Always ready to listen to her thoughts or give back to her some weird impressions that somehow came from far away.

She sipped a little of her cold tea and sighed sleepily. She rose, turned to one of the dark mirrors, and touched her hair with a comb. Strangely, she recalled a pretty compliment that Val Pakkerman once paid her. He had loved her beautiful hair.

The light reflected in the mirror caught her attention. Ksentsajboa! He was surely trying to attract her attention.

She turned back to him, gazing, wondering whether to arouse herself and listen to his faint messages yet tonight. It was late. She should be going home.

Again she sat before him. And suddenly she was alert. Some strange vibrations reached her. She raised her dark eyebrows.

"What is it? ... What is it?"

She allowed her heavy lids to fall closed for a moment. Not with sleepiness. With a mood. A mood that responded to the light of the Egyptian fire tender. His quiet, intense fluttering whispers began to penetrate. Not as audible whispers; rather as *whispered images*. The light came and went... The delicate images took shape in her mind through some fragile sense that was neither sight nor sound....

Mist... A purple cliff;... Mist Beyond the cliff that stretched away...

She was standing on the brink of the purple cliff.

The blue waters of the lake below the cliff were invisible through the mist.

The waters were pounding away at the cliff ceaselessly. They were wearing it away. Slowly it was giving way. Soon it would cave in. The ground under her feet would be eaten away, and she would fall... and everyone on the cliff would fall to their death... Mass destruction was coming. Soon, soon...

But she did not wait. She saw. She knew. And she wasn't obliged to stay on the cliff while death approached. For she was a graceful bird with strong wings.

She was a graceful bird whose sharp eyes could see through the mist that lay upon the lake.

She flew from the edge of the cliff and winged her way over the wide blue waters. Her destination was somewhere beyond the mist. She could see it now. Distant hills, towering above the other side of the lake.

But as she flew, a flock of ugly brown buzzards swooped down and tried to fly with her. They had the talons of buzzards, and they cawed like crows, and scolded like sparrows. And they spoke of *mirrors*. Well, they were a quarrelsome flock. But

they wanted to fly with her. She could guide them.

Together they flew. She watched them, winging beside her. Vultures, they were, biding their time.

They refrained from molesting her until they approached the hills at the far side of the lake. Now she was about to alight. This was her destination.

They pounced upon her, meaning to kill her... They caught her. *Their talons tore into her flesh...*

Madam Lasanda's eyes opened.

She stared through the dim fire of the little Ksentajalboa. Had she fallen asleep again? Was it only a dream? Or was it a message?

SHE ROSE, walked uneasily about the room, allowing her eyes to dwell upon the jeweled murals on her walls. It was always a restoring thing to do—to rest her eyes upon the panorama. The fanciful Oriental minarets usually lifted her out of her heavy thoughts. There was something fairy-like about the little jewels that gleamed at her from the windows of the painted mosques. A soothing effect.

The effect didn't come. There was something disturbing. A single diamond was glaring back at her too harshly.

She turned and snapped off the Ksentajalboa. Now there would be less reflected light. Yes, the cold blaze from the diamond softened. She narrowed her eyes, trying to convince herself—

It was still there. More in her mind than in actual picture, she thought. A lingering image. It was not a diamond, it was an eye—the eye of one of those vultures that wanted to fly with her.

She shook her head. It must have been the tea. Or the air in this room

was too close. She would hurry home. She reached for her coat.

The doorbell sounded.

Who could be ringing at this hour? It was nearly midnight.

"It's Martin, of course," she said to herself. Martin had no doubt been waiting for the past hour to chauffeur her home. Quiet, patient little Martin.

She went to the door, opened it an inch, and gave a little lisp of surprise. It was Mayor Channing.

"You again! Well," she said, opening the door a little wider.

"I tried to get you at your residence, Madam Lasanda. You'll pardon me," he was fairly panting, and he paused to get his breath. "When you didn't arrive home as expected I decided to try here."

The odd nervousness in his manner as he faced her was something he had acquired during their earlier conference, she thought. The intervening hours had hardly restored his poise.

"It's too late for me to invite you in," Madam Lasanda said.

"I'll be brief. I'm flying to Africa. Tonight. Some of the boys and I. Will you go with us?"

"I beg your pardon."

"We want you to come along. I told the boys all the things you said. They're convinced that you—"

"That I deserve a license to tell fortunes?"

"License, of course! A trivial detail. We didn't even discuss the matter. But on this Africa business, they're convinced that you know whereof you speak."

Madam Lasanda smiled. Convinced, were they? "You put it nicely."

"You could lead us where we want to go. They wanted me to urge you—"

"And you were so sure I didn't deserve a license!"

"Forget the license! We'll print up a whole barrel full of licenses for you. We'll advertise your racket—I mean your gift—at the city's expense if you say so. But please, in heaven's name. This is urgent. The boys and I are hot on this notion of going. Well, what about it?"

She smiled cynically, glancing past him at the darkness of the hallway. "I can imagine how I would be, flying with a lot of quarrelsome birds."

"Quarrelsome birds? You've never even met the boys, have you? They're a fine, sociable gang."

She tried to put the dream out of her mind. "I'd be an enemy from the start. You know it."

"We'll take our chances."

"You've thought it through?"

"Oh, the boys have guessed that you might try to sabotage our plans any way you can, short of crashing the plane." He winked as if to belittle any worries. "Think nothing of it."

"You're giving me the benefit of the doubt," Madam Lasanda said caustically. "But if you think I can guide you to the mountain that's calling you, you're quite right."

"Then you'll go?"

She was looking in the distance again. "I wonder what I might accomplish..." She thought of Val Pakkerman... "All right, I'll be at the airport in two hours."

CHAPTER XXXI

CHESTER Bandyworth and four Green Coats had been the first party to start out after the rest period. Bandyworth's blood was boiling. Not entirely with anger. He still chafed at the mention of losing his uniform, for both the ex-captain

and that funny faced Jimmy Ruggles had dealt him a generous handout of embarrassment.

Bandyworth was hoiling with indignation. But that wasn't all. A wave of ambition had also sent his temperature soaring.

"Next to Sully, we take our orders from you, Bandy," one of the Green Coats had said just before they mounted the glide-walk. "After the way you trapped the captain and Ruggles, you're our man."

"Me too," another Green Coat agreed. "You got 'em. It was Sully that let 'em get away."

Bandy acknowledged their compliments. "If I pull a reward out of this deal, you fellows can split half of it among the four of you."

That was generous enough, and the Green Coats knew it. Bandy had to hush them a moment later. They were gliding along through the dark tunnel. Fine transportation, but it had its drawbacks. One couldn't talk aloud without running the risk of being heard. All along the inky black walls were little alcoves—if one knew where to find them. The fellow who knew his way through this midnight tour could step off and wait in silence until he heard someone come along.

However, it wasn't likely that the ex-captain and his sidekick would know about these. If they stopped off it would more likely be at one of the lighted stations.

Bandyworth rubbed his bruised eye. His encounter with Jimmy Ruggles on the balcony had changed the complexion of his right peeper. He could have used a beefsteak to advantage. Well, as long as he was riding through the dark the boys would forget that he was wearing a shiner.

He'd make Jimmy Ruggles eat gravel for that, though, when he got a chance. He'd have done it with stones

when the two captives were floundering in the pit. But the Scravvzek had come too soon and cut that party short.

He muttered bitter words at the thought of the ex-captain slamming that rock at him. Sheer luck that he hadn't folded up from that blow. The Scravvzek's invisible hand must have been over the whole gang, protecting them, he decided. They'd all come through the war with the Bunjojops almost unscratched.

"Whatcha whistlin' about, Bandy?" one of the Green Coats asked.

"Thinkin' how I'd like to bust that ex-captain's ribs right through his backbone."

"That ain't the way Sully wants it done, is it?"

"Not if I heard him right," said another Green Coat. "I thought he gave you a plan—"

"Quiet," Bandyworth ordered. "Wait till we get into the light and we'll talk it over."

Minutes later they crossed the inky Black River and coasted on into the narrowing tunnel that would take them, very soon, into the vast chamber of the world's mirrors.

"Station ahead," Bandyworth said. "We'll stop off for a drink of water and a minute's rest before we walk in on the mirrors."

THE PATCH of light came sweeping over the surface of the walk. Bandy's four companions became visible as blotches of darkness with highlights of green spreading over their shoulders. Then the full light reached them. They stepped off the glide-walk and onto the solid gravel floor. Bandy followed them.

Bandy strode across the end of the station room and bent down to take a drink from a small spring that bubbled out of the wall.

"What do I smell?" one of the Green Coats said with a suspicious sniff.

The others joined the sniff. "Food," someone said. "They must have stopped off here for lunch recently. I think we're on the trail."

The skeptic of the group guessed that it was probably Doc Pakkerman's trail and not the ex-captain's. How, he asked, would the ex-captain know there was any reason to come back into this world beyond the Black River?

"He could have heard the Scravvzek speak of it," Bandyworth said, looking up from the spring. "Or he could have tried following the Scravvzek when the thing walked off on Pakkerman's legs. If there's been any lunching done here—"

Bandyworth stopped, noticing that one of the Green Coats had picked up a liquor bottle.

"Where'd you get that?"

"Found it here beside the bench."

"What's in it?"

"Lava bubbles—General Snoozey's favorite drink." The Green Coat took a swig and passed it to his neighbor. "Uh-yum!"

"Gallagher's bottle." Bandyworth was touchy over the discovery. He had wondered why the others weren't crowding for a turn at the spring while he had monopolized it. They were drinking behind his back. And they hadn't even reported their find until he discovered them. "Who found it?"

"I did," one of the Green Coats said, as if he thought he might receive a citation for his act.

"Why the hell didn't you say something? The next time, you report to me, pronto. See? Let's have that bottle."

Sully took a long gurgling sample.

"That's Gallagher's brand, all

right." Bandyworth glanced around the station sharply. The irregular walls led off into dark openings that might have been the sleeping quarters of the Scravvzek, for all he knew. He didn't care to go exploring into unknown regions. Besides, his line of reasoning told him that the bottle pointed the way ahead. "How was that bottle lying when you found it? Here, put it back just the way you found it."

The Green Coat obeyed. Bandyworth studied the matter. He paced across to the gravel path that paralleled the moving walk. He sighted across. Then he nodded.

"Just as I thought."

"What do you make of it, Bandy?"

BANDYWORTH cast his eyes toward the shadowed openings among the sections of walls before he answered. Then he nodded more confidently.

"Yes, I know what's happened here, boys. It was this way. Captain Burgess and Ruggles must have contacted Gallagher hours ago when they first entered these mountains. They must have learned he had access to food. They guessed that he was a pushover. So, after they got away from us at the pit, they went back to him and put the strong arm on him. They made him get food and drink for them. Then they put him on the glide-walk and got on with him, and they were off for the races. As long as they could keep Gallagher, they'd feel safer about finding their way back.

"By the time they reached this spot, they stopped off to eat before they took the run on in to the mirrors. Then they must have heard us coming. So they picked up and left in a hurry."

"How do you get that?"

"Because Gallagher didn't empty

his bottle. In fact, he had barely started on it. If they'd had all the time they wanted, he'd have killed it before he budged. And then he might not have been able to judge."

The Green Coats might have agreed to this theory. But the skeptic among them shook his head. "Why would Gallagher have left the bottle here? Bandy, you know he wouldn't have done that. No matter how fast they jumped aboard, he'd have held onto that hottle."

"Boys, we've poked plenty of fun at Gallagher," Bandy replied, lowering his tone, "but in this case we'll have to give him credit. He left the bottle to show us the trail."

"You don't mean it," said the skeptic. He picked up the bottle and took a drink, and shook his head.

"He probably got just one good swig," said Bandy, "like this." Then Bandy took the bottle and went through the actions of striding toward the glide-walk, taking one deep drink, corking the bottle and sliding it back across the gravel toward the bench.

Two Green Coats jumped for it, for fear it would slam into the rocks and break. The five men parleyed over whether the action could be accomplished that swiftly without Gallagher's attracting the attention of the ex-captain and Ruggles with his act. Each of them went through the maneuver, grabbing a quick drink and slinging the hottle back toward the bench. There were as many versions of the events as there were men, and the bottle grew emptier with each version.

The five found it worth while to sit down and settle several points of difference by long-winded arguments, passing the bottle as they talked. They soon became mellow, if not soggy.

"Boys, these shmall differences of opinion will not lessen our a'legrance to our good leader Bandy," one them declared, and he rose as if to deliver a Fourth of July oration.

IT WAS agreed that Chester Bandyworth was to be their leader through thick and thin, and if he won the award that Sully had offered, it would mean an award for all of them.

"Cut the operation," said the skeptic. "Bandy, you give it to us again. The plan, I mean. Sully's plan for handing these damned gate crashers when we catch 'em. What we got to do to win new uniforms an' a big dinner?"

"That's the painful part of the story, boys," said Bandyworth. "We don't get to kill these gate crashers outright. Instead, we put the Scrvvzek poison to 'em, and this time we've got to make it work. The Scrvvzek'll want to see it work. If we can get them doctored up right, we'll put it over right on the stage of the Glass Arena. Give 'em each a knife an' watch 'em chop the hide off of each other."

"I don't see it," said the skeptic. "That guy Jimmy Ruggles could never be made to fight his captain. You know that."

"I know damn' well he can. Anybody can be made to fight anybody, if they got doctored up with the right kind of propaganda."

"This I'll believe when I see it. That guy was as loyal as a dog, and anybody knows there's nothing in the world more loyal than a dog. And from what I've seen of them together this time, the ex-captain is still like a fond father. Damn it, Bandyworth, you can't split up a combination like that. It can't be done."

"The hell it can't. I've already started it."

CHAPTER XXXII

"How?"

"Puttin' a hug in Jimmy Ruggles' ear."

"What kind of hug?"

"Tellin' him a few things about the ex-captain he didn't know."

"What's he say?"

"He sort of opened his eyes."

"When did all this happen?"

Bandyworth hesitated. Any mention of the contact he had made with Jimmy Ruggles a few hours earlier would bring up that certain unpleasantness that went with losing one's clothes and getting one's eye blacked. Bandyworth expanded his chest and launched a brazen lie.

"I talked with Jimmy Ruggles, you know. And when Jimmy Ruggles began to see how many damned dirty tricks the captain used to play on him, you shoulda seen his face. He turned to me and said, 'Bandy,' he said, 'I gotta hunch you're right. But I'm stuck with the captain,' he said, 'an' I'll have to string along till the time's right. But I won't forgit what you've told me,' he said, 'and the first time I catch him pullin' any more of his damned dirty tricks—'"

Jimmy Ruggles said that to you?" the skeptic broke in.

"Sure. If it hadn't been that he was stuck with the captain—"

Bandyworth broke off short. A rustle of footsteps from one of the shadowed openings at the farther side of the room broke in upon the argument. Bandy and his four Green Coats looked up to see Jimmy Ruggles come tearing out, and his fists were clenched for business.

"You lowdown liar!" Jimmy Ruggles yelled. "You'll swallow those words, or I'll—gosh-ding-it, I'll do it anyhow!"

ALLAN came out of the shadows only half a pace behind Jimmy. His fists were three swings ahead of his thoughts. He saw Jimmy jerk Bandyworth to his feet and throw a right to his jaw before the blow-hard White Shark could bat his eyes.

"Hey! Wait a minute! Damn it, I was jist kiddin' the boys—"

Bandy's splutters were just enough to add weight to Jimmy's punch. Thud! Bandy went staggering backward. Allan took a swing at his solar plexus as he went by. Bandyworth collapsed quietly on the gravel floor.

Then it was two against four. Allan had never seen Jimmy fight like this before. He was entranced to watch the boy work, and at times the battle was almost one against four, with Allan as an interested spectator. He worked from the outside. Jimmy was in the center of things. When a Green Coat went plunging in as if to settle Jimmy with one surprise blow, Allan was there to thrust the fellow off his pins and shove him back against the wall.

Jimmy scored a knockout on a tall lanky Green Coat, who gave a sad *huff!* His hands slapped the gravel, and his shoulders made a perfect stumbling block for two more Green Coats who tried a center rush on Jimmy. Allan drew one of them to his feet, swung an upper cut at him, barely grazed his chin. The fellow came back as if on steel springs. He swung a wide one, Allan ducked it, and delivered to the fellow's breadbasket. The resulting "Unch!" was an interesting sound effect, and Allan worked the territory for two more lusty unches before the sound effects ran out. The fellow went down trying to say, "No!" but all he did was open his mouth like a fish.

The indulgence in sound effects almost proved costly for Allan. One of the Green Coats who had already sunk to the floor still had a kick left in him, and he delivered it to advantage. Allan caught the pressure on his ankles, he skidded on the gravel, and fell across the stone bench.

That was when Allan heard a slight cry of distress from Sue Carson. She had been watching from the shadows, and now she came out with a nimble bound, like a stage dancer imitating a gazelle. She raised the lunch basket and might have lambasted anyone, friend or foe, who came within her reach. She needn't have bothered. Allan was on his toes again. The Green Coats who fell from Jimmy's slugging fists decided not to get up. The last of the four was the skeptic. He came Allan's way, and the look on his dizzy face showed that he was already seeing stars or planets somewhere far beyond the cavern ceiling. "Don't do it!" he cried to Allan just in time. "I'll—"

He illustrated his point by simply dropping to the floor and stretching his arms out, as if this were exactly the rest the doctor had ordered. He rolled his eyes wistfully, saw Yippee, and gave an unbelieving gulp just before fainting away.

"Nice work, Jimmy," Allan said.

"Thanks," Jimmy's eyes were large. "Captain you didn't believe what that white-bellied rat tried to tell about me, didja?"

Allan gave a dry laugh. "Don't waste your breath asking silly questions."

"Thanks," Jimmy said more comfortably.

"These birds would poison their own grandmothers if they had a chance. The amazing thing is that they believe one another. Let's get out of here."

SUE HAD picked up the bottle and was swinging it like a hatchet. "You boys didn't give me a chance. I would have conked one of those birds just for practice."

Allan had given her strict orders to stay back. In fact, he had whispered to Jimmy, right up to the last minute of their hiding, to pay no attention to the talk. No matter what was said, they should remain hidden. But Bandyworth's brazen lie had set Jimmy off like a trigger.

"I still want to conk somebody," Sue said looking around.

The skeptic, lying peacefully, tightened his eyes. But Bandyworth made the mistake of uttering a hopeful groan. Sue whirled and cracked him over the head with the bottle, and he went back to sleep.

"There," Sue said. "That will improve my disposition for all day. Okay, Captain, where do we go from here?"

"The glide-walk," Allan said. "Have you got the lunch? This way out."

Once again they were coasting along through the narrow black tunnel, wondering what adventure might lie before them. They finished eating along the way. Jimmy admitted that he had been hungrier a few times in his life, though he couldn't remember precisely when. And Allan assured him that he should stop eating altogether, he fought so well on an empty stomach.

Many minutes later their track carried them into view of an opening that was like the whole out-of-doors, shadowed in the deep twilight. If there had been people to see within this vast chamber of darkness, they could not have been seen except at close range. It was the mirror of the world that rose before them—an immense shadowy cone, like a perfect volcano with softly illuminated sides.

"We're coming to it at last," Allan said. "See it, Sue?" He touched her hand.

"I can't say a thing," Sue answered. "I'm all out of breath at the sight."

"It's a volcano," Jimmy said. "Once I saw some fire up at the top."

"Orange fire?"

"Could have been."

Allan felt like a stranger entering a strange city in the middle of the night, with no streetlights or street signs to give him his bearings. He wanted to make arrangements with Sue and Jimmy for a central meeting place, for anyone could see at once that the spaces of this room extended into miles. This place deserved to be explored. Here, Allan knew, he would find some answers.

"We're going to look into this little matter," Allan said. "Woe unto Bandyworth or any other man that tries to stop us. Looks like we're coming to the glide-walk terminal at last."

The approaching station could be seen as a platform of white concrete might be seen on a dark, foggy night. The line of gray which led down the incline over which the glide-walk was passing appeared to open into a wide circle around the base of the great volcano-like cone. From the opposite direction it returned to form the upper level—the returning glide-walk.

"Look, Jimmy—Sue," Allen said. "It's dark enough here by the station that we can fix some sort of signal to warn us if the search parties come this way. The clatter of that bottle would do it. We can stretch a cord across the incoming glide-walk, and hang that lava bubble bottle on the end...."

CHAPTER XXXIII

THE SIGHT that unfolded before Allan's eyes at the end of the

glide-walk was like nothing in this world. For a moment he forgot to breathe. He wondered how a blind man might feel, looking upon the sun for the first time.

It was easy to forget that Jimmy and Sue had gone in another direction. He should be looking for them—but would a blind man, having his first glimpse of the sun, be able to bring his attention back to a pair of companions who had gone astray? --

What Allan was seeing was not the sun, nor the sky, nor anything related to the heavens. It was a gigantic room, so large that it would seem there should be clouds floating along the ceiling. Nearly two miles high, he estimated. And with clouds? Sort of. There were clouds of orange fire rolling out of the top of a volcano-like cone. Like steam, they skimmed along the surfaces of the high ceiling and melted away into nothing.

It was the cone itself that struck Allan with awe. It must have been two miles in diameter—yet the room was not filled by it.

It must have risen to a height of seven or eight thousand feet. It was a mountain within a mountain. The great loop of the glide-walk moving around it gave it the effect of slowly turning.

It was strangely illuminated, and over its perfectly symmetrical surface Allan could see hundreds—yes, thousands of patches of color. How many different hues and tones and tints could he brought together in a single picture? A million or more, he had once been told.

Was it true that an artist could distinguish seven hundred shades of green? Somewhere in this massive cone-shaped form there must have been all of those shades and more.

But this was only the first quick impression of Allan's discovery.

What he was seeing, upon closer inspection, was a glass-like surface that was composed of small, sharply defined squares. Each square, only about three by three inches, contained a picture.

Sixteen squares to the square foot—and how many thousands of square feet?

There must be millions of tiny pictures set side by side over this surface—each picture was a person—a face. At once Allan caught the similarity to television. These pictures were in motion. People in action.

What people? Where did this come from? What was its purpose?

Was it some gigantic toy that operated automatically? Or was it an actual image of persons in other lands—images that revealed their actions and expressions of this very moment?

In answer, Allan presently found a picture of someone, turning the page of a daily calendar. What day of the week was it? Allan had almost forgot there were such things, since his entrance to this timeless world. Time had fallen by the wayside. But with a little thought, he was able to adjust his mind to the date on the calendar. And then he was sure that all this spectacle before his eyes was happening now. It was an instantaneous transfer of images—faces and voices. As if by television, it was all coming into this mountain-sized receiver as it happened!

Who were all these people? Anyone in particular? Or everyone?

In quest of an answer, Allan began to walk along the base of the massive cone.

HE WAS tempted to ascend. The glass surface was smooth to his feet, but the slope was gentle. He took a few steps upward. He was walking on faces—illuminated, tint-

ed photographs. He was gratified to find that his shoes left no tracks. The expressions of the faces were quite unaffected by the contact of his heel plates. He smiled to himself over the absurdity of his thought. The people might be five thousand miles away. They certainly didn't know anyone was stepping on their noses.

The faces, though reduced in size, were reflected as perfect and sharp as one's own face in a tinted mirror. As soon as he had adjusted himself to the strange experience of walking over the mountain of mirrors, he turned his attention to the variations in color.

The faces did not appear in natural color. This was strange. For several minutes he saw no rhyme or reason in the curious color arrangements. Then he got a clue. He had come upon a great number of persons who were listening to their radios. *He heard the music of the radio program playing softly.*

Two facts struck him as significant.

First, all of these listeners were grouped. Second, these faces were all dominated by the same color—a rich blend of mahogany and brown. Allan, on hands and knees, studied the rapt expressions of the listeners. The program changed presently; and, significantly, the color of these several pictures changed with it.

Allan arose slowly to observe the extent of the change. An area of many square yards had rapidly converted into a new reddish hue. Each of the reddish squares contained the face of a listener.

The red-tinted area continued to grow, like an irregular piece in a gigantic jig-saw puzzle, spreading to occupy more space. Which meant that somewhere in the world more and more people were tuning in on this particular radio program. Allan

caught the significant fact about this vast composite mirror. It automatically grouped people.

This was only the beginning of his discoveries. Just enough to whet his appetite.

He walked a little distance away. The patch of color representing the radio program could be seen in better perspective from a distance. As he moved back from the cone, the reddish area showed as small in comparison. Hundreds of other patches of red could be seen over the surface, no two of them the same shade. When Allan walked up the side of the cone to examine one or another more closely, each widened out to reveal the hundreds of closely set squares, each square containing a face.

People, people everywhere! What a show! A personal appearance for everyone! Millions of miniature stages in mirror form, each containing an actor. And with each visible performance, sound effects were faintly audible.

It was a complex thing, and Allan saw at once that it was not a simple presentation of individuals. It was a multiple pattern that could be studied in close-ups or at a distance. The infinite variety of colors made it possible for one to see the spectacle in terms of groups.

"Birds of a feather!" Allan said to himself. "They may not know they're flocking together, but this master-minded gadget groups them."

INDIVIDUAL lights were continually blinking off, and others were simultaneously popping out at other points. Actors were constantly removing themselves from one field of activity and joining another. Allan began to understand the dynamic qualities of this vast mirror of the world. If a person sitting in his home some-

where in the United States of America chanced to turn off his radio and pick up a magazine, the area of radio listeners would diminish by one lighted square; and elsewhere, in the cluster of magazine readers, a new light would appear to present John Doe lost in his magazine.

Allan would stop, take to his hands and knees, crawl along the sloping surface without being aware that he was crawling. Again he would sprint over one patch of color after another—over the immeasurable millions of persons working at trades, toiling in the fields, perspiring over machines. Then something would compel him to stop again.

He caught his breath with sharpened interest. Darkness. These frames were so faintly lighted that he had almost passed over them. Purple and black—and the deed was murder!

Scores of different murders were being pulled off right before his eyes. Some were American, he knew, from the backgrounds of city streets. Cars visible on a distant trafficway. The slight hum of city noises. But others were murders in India, another on some desert island. And again, on the snow field that might have been Siberia. Although the pictures revealed an amazing variety of bloody deeds, they were all murders. And so they showed up as a group, dominated by a single color-tone.

Allan stopped to watch a few cold blooded murderers in action. A point-blank shot with a revolver. A tourniquet around the throat of a choking victim. The flash of a hatchet. The quick plunge of a hypodermic needle, accompanied by an innocent and reassuring smile. *Here and now!* This was the world in action, and it was brought with all the reality and clarity of a million television screens stacked together.

A million? A billion was more like it. No—two billion. Was it possible that there was room here for everyone?

What was the meaning of such a colossal mirror, hidden below these lost mountains of Africa?

The questions in Allan's mind came like a blizzard. But this he knew. He *liked* this great instrument. He was captivated by his discoveries. One discovery after another.... People behaving unseen.

Radio listeners, murderers, factory workers, farmers in the field, *lovers for'd in each other's arms*,—he paused. A tremor of excitement passed through him when he came upon this area. He felt more than ever like an eavesdropper, to be looking in upon the quiet, secret moments that were the essence of life to the couples before his eyes. Lovers, lovers, everywhere. He started to walk away. He looked to see what had happened to Sue and Jimmy. They had followed him at a little distance and had stopped when they became absorbed in many yards of frames displaying the rehearsals for theatrical productions.

HE FELT a trifle embarrassed over his discovery, and wondered if he shouldn't prevent their seeing this part of the mirror.... Lovers from every land. Primitive tribes, lost in the forests. Couples on board ship. Softly lighted bedrooms. The seclusion of dimly lighted parks.

"Who but the songwriters have ever stopped to realize that the whole world is in love?" he said to himself. Then he moved on.

Again he scouted along the base of the pyramid and looked back, to regain his perspective. Much wider areas than any he had seen were waiting to be examined.

The widest band of all was the deep blue field of *sleep*. It appeared to cover a fourth of the entire cone.

The thought gave him a curious shudder. Was it possible that at any given moment at least a fourth of all the people in the world were asleep? *Dead to the rest of the world?*

He could see for himself that it was true. What a dreadful waste! One person out of every three or four asleep!

He walked up the slope to view some of them more closely. Thousands of sleepy heads were visible to him. Each was at least trying to attain that deep luxury of being lost to the world. Lost as if in death.

An hour or so later Allan came back to the staggering thought that the entire population of the world was spread before him.

It took a little mathematics. If there were roughly two billion people in the world, and each person was presented here in a three inch square, how much space would be required? Was the pyramid large enough to accommodate *all* people?

Not until he had walked part way around the base, estimating the whole distance, was he satisfied that this must be the case.

Converting steps into feet and feet into miles, he guessed that the cone was at least six miles in circumference and about a mile and a half high.

He sat down to figure the matter out. By this time he had become accustomed to walking over the little three-inch mirrors, stepping over the faces of people who didn't seem to mind it at all. Consequently he gave no thought to the fact that he now sat upon an area of foresters who were cutting down tall timber with power saws, just below the seat of his pants.

Jimmy and Sue came along, then, and got in on the jumble of figures.

"If there are sixteen persons to the

square foot," Allan said, "and there are more than twenty-seven million square feet to a square mile, how many square miles would this place have to contain in order to provide a little mirror for every face in the world?"

"Come again?" said Sue.

"He's off," said Jimmy. "I've seen him go into these brainstorm on board ship. Once he doped out how many drops of water there were in the Pacific ocean."

"How many were there?" Sue asked innocently.

"Now wait a minute," Allan said. "You and Jimmy can work on the Pacific ocean if you want to, but I believe in figuring out what's before my eyes."

"Oh, you're going to count your eyelashes, I'll bet. Can I help?" Sue teased.

"Cease firing," Allan said. "You've got your sights on the wrong target. You don't waste your tin fish on a rowboat if there's a battleship on your tail. Look, friends, a cone six miles around and a mile and a half high ought to contain roughly at least a hundred and twenty-five million square feet. Do you follow me, Jimmy?"

"I'm tryin'," Jimmy said hazily.

"All right. We have sixteen faces to the square foot. We have an eighth of a billion square feet, plus. Square feet times sixteen equals two billion persons, plus."

"Is that good or bad? Sue asked.

"It means we're all present. The whole darned human family. This super-colossal gadget brings everyone in the world together in one big moving picture."

Jimmy's eyes wobbled. "No wonder I'm dizzy. I never could stand crowds. I used to stand on the street corner in the center of town an' try to see how

many people went by with faces as funny as mine."

"How did you come out?" Sue asked.

"I couldn't count that fast," Jimmy said. "No kiddin', I got plumb bleary-eyed, just lookin' at faces. There's somethin' about the ordinary face—not your face, Sue. Yours ain't ordinary. But you start feedin' your eyes on the street corner crowds an' it does somethin' to you."

"What kind of something?" Allan asked, as his eyes continued to rove over the hundreds of bright little mirrors.

"Well, in a few minutes it gits downright depressin'. It makes you think what a sorry lot the whole big human family is. You ever had that feelin', Sue?"

"I've seen lots of crowds," Sue said. "But the footlights generally keep me from seeing them too well."

"All I say is that I couldn't take much of this," Jimmy said, gesturing toward the wide expanse of mirrors.

ALLAN scowled. "They're just people like yourself. What's depressin' about that?"

"Maybe it's cause I always start running people through a sieve, in my mind. I mean. I say to myself, there's gotta be some perfect specimens in all this crowd. Not too fat or too slim. Not too silly lookin' or too worn-out lookin' or too ornery—"

"You're looking for men patterned after gods," Allan said. "Well, the human family doesn't grow too many of that kind. And when they do come along, you can't always be too sure from their looks that they live like gods."

Allan illustrated his point a moment later. He motioned to them to come and listen in on a conversation.

"Get'in on this board of directors,"

he said, "as long as we're passing this way."

Sue and Jimmy got down on their hands and knees beside him. The picture before them cut through ten or twelve frames, and the faces would cross from one frame to another. The directors of some business concern were huddled together.

"The picture gets bigger as you look at it," Jimmy observed.

"And the sounds get louder," Sue added.

Allan had thought at first that this phenomenon was just an illusion. But now he saw that it was an undeniable fact. One's own close focus upon a face or group of faces brought the frames out larger and brighter, as if through some magical effect within one's own eyes. And the low sounds somehow amplified within one's ears. Each new discovery added to the usefulness of the gigantic gadget.

But it was the content of this particular conversation that Allan had meant to call to the attention of his companions.

At the end of the table sat a fine looking man with clear honest eyes and beautiful silvery hair. He was whispering to his neighbor.

"Give me your vote straight through," he said, "and I'll squeeze those suckers for their last dollar. They trust me all the way. All you'll have to do is sit back and fleece them."

Jimmy gave a slight shudder. There, Allan thought, was one of his men like gods, as far as appearance went. They listened to three or four more off-the-record remarks from the silvery-haired man. What a fine, honest face to be combined with such a cold and ruthless nature. To Allan, this was as revealing as the murders. All within the law, of course, but

deadly enough that it would cripple certain "friends" for life.

Friends across the table!

Allan caught the look of disillusionment in Jimmy's eyes.

"I'll jog along," Jimmy said. "There oughta be some street corner crowds where I can see a lot of funny faces. Lookin' at funny faces like my own, I can make believe that they're kinda good, harmless people who don't believe in gougin' their neighbors."

OCCASIONALLY Allan would start to walk around the side of the cone, looking for Doc Pakkerman. But before he would get far, some revealing patches of light would catch his interest. He was like a boy moving through the most interesting library in the world, unable to pass through the first room because every book attracted him. Allan wanted to stop and read every face. He wanted to share every human drama revealed here before him.

And yet, the pattern of deceit which he had seen at the board of directors' meeting was repeated before his eyes, over and over during the hour that followed.

At first he tried to laugh it off. He had gotten himself into an area where deceit abounded. He moved across the way and began to review some of the domestic scenes he found there. Husbands and wives making plans or debating over the family budget.

At first it all looked pleasant enough. But soon Allan saw that again he had walked into a region of bad feelings. He began to read between the lines. He saw the sinister twists and turns that were involved in many a congenial breakfast table conversation. Here and there, hearts were being crushed deliberately. Slyly, politely it was happening, in one fami-

CHAPTER XXXIV

ly after another. And all too often the cruelty was masked by a superficial sort of love.

This was depressing. Allan turned away.

He walked along for several yards with his eyes half closed.

He wasn't ready to look at anything more just yet. The mood of melancholy had struck deep. He needed to walk it off.

To his delight, Sue called him to come and see hundreds of cartoonists at work.

What a relief! What a wonderful thing for mankind, Allan thought. Who better than the cartoonist could make man laugh at himself and his own absurdities?

"Those boys are getting a kick out of their work," Sue said. "Imagine spending hours working up your best smiles for the public."

Some of the fellows were sweating blood, Allan could tell. Some were almost too fatigued to grind out their daily stint under high pressure. But there was a spark of something creative here. A spark of something wholesome that kept them from flagging.

Allan walked back to take a look at the area of laughter from a little distance.

Beyond the cartoonists was a long band, bright with yellow coloring, composed of millions of amused faces—faces of persons who were pouring over the recent output of cartoon and comic strips and funny stories. The world was certainly brighter and gay-er, and more endurable for a passing moment of laughter.

Allan tried to convince himself that it was more than a passing salve for the deeper evils he had seen. The blues couldn't dominate a world if there was enough of this bright dancing yellow.

THIS WAS the place the Scravvzek had spoken of. Doc Pakkerman had been complimented for spending his time here. Sully had been criticized for staying away. The study of these mirrors had been advised by the Scravvzek—why?

Allan was beginning to understand.

It was disillusioning to look upon mankind unmasked—to see the evil of man's inhumanity to man revealed.

Allan was absorbing disillusionment on every hand. Neglect and carelessness. Ignorance. The utter hopelessness of many peoples. Poverty. Starvation. Slavery. Crime.

Cells, cells, cells! Men with heavy hearts. Men filled with treachery and hatred. Nothing to feed upon in their idle hours but thoughts of vengeance.

Courts. People waiting trembling. Waiting for justice. Waiting for sentences. Guilty people winning court victories, bought cheaply by an influential friend.

Lawyers behind the scenes, wearing their masks of contempt. And here and there the honest ones, battling courageously for justice. Fighting those to whom the courts were only arenas for the sport of winning....

With a sigh of nostalgia Allan turned to notice an area of millions of kids in school.

There was something for the world's hopes to feed upon. Allan moved along rapidly. He was almost afraid to look into the school rooms too closely for fear he would meet with more disillusionment. Here a few bright pupils were enjoying the lively efforts of their good-looking teacher. He smiled approvingly as she joked with them. He seized upon that chance finding, and wishfully multi-

piled it by the wide, wide expanse of the school room color. The cheery yellow and green mingled to brighten what seemed to be acres of the vast shadowy cone.

His eyes were watering.

He took a mirror from his pocket and looked at himself. He was only a shadowy blur. His long gazing at the mirrored people had set up a curious adjustment in his eyes. At first he was scarcely able to see the veins of his hand or the laces of his shoes.

He looked across a half mile of space toward the nearest walls. There was a light gray path that must have been the ribbon of the glide-walk, moving slowly around the outside of the great room.

Other shadows appeared to his blurry eyes—other persons moving along the cone. Sue and Jimmy, no doubt.

Or would one of those shadows be Doe Pakkerman?

The bottle alarm clinked. Someone was arriving by way of the glide-walk. Allan gave a low whistle. The nearby shadowy figures materialized into Sue and Jimmy, coming on the run.

"Visitors, Captain!" Jimmy said excitedly. "Do you reckon it's Bandyworth comin' up for more punishment?"

"Whoever it is, we'll keep out of their way," Allan decided. "This room is big. We can keep miles between us."

THEY HIKED along the dark outer wall among the columns of stone. An endless arcade of arches bordered the base of the great cone. Some were lighted by glowing rocks, but deeper recesses offered enough darkness for good hiding.

"Someone should warn Bandyworth that I'm bristling for another fight," Jimmy said.

"Just be sure they don't get you in

a corner and dope you with Scravvzek poison," Sue said.

"Scravvzek poison!" Jimmy scoffed. "There's nothin' to it. It's not real poison that comes in bottles."

"Then what is it?"

"It's just the devilish business of startin' people to hate each other, an' fixin' things so that hate'll grow. That's why I'm not worried that they can ever get anywhere, tryin' to turn the captain an' me against each other."

Allan quieted their whispers. Seven white stone arches ahead were glowing with soft bluish white light. It was a fair guess that this spot was occupied and they advanced on tiptoe.

The smooth white floor was striped with blue shadows from the columns. One shadow, however, suggested the form of a tall man, apparently leaning motionless against a wall within the center arch.

In order to get by the place without being seen, Allan led his companions back toward the cone again.

Now they looked back over their path for signs of a search party on their trail. Jimmy was definitely disappointed. Fully half a mile away, two flashlight beams were whipping along the walls. The searchers had gone the other way. Their silhouettes showed, presently, against a distant patch of light on the cone.

"Five of them," Jimmy observed. "Must be Bandy and his Green Coats again. Let's go back after 'em, Captain."

Allan said no. As long as they were starting around the cone the other way let them go. Let them search in that direction to their heart's content. Allan, Sue and Jimmy would be free to go on about their business.

"Back to the animated rogue's gallery," Sue said with delight, and she struck out. Jimmy ambled after her, and soon both were again lost in the

ever fascinating game of looking in on other people's lives.

Allan, left to his own devices, tiptoed back toward the seven lighted arches. That shadow—

Beyond the central arch the circular wall came into view. The tall man was there, leaning against the wall, one arm resting on the marblesmooth top. It was Val Pakkerman.

Allan watched, scarcely breathing.

Pakkerman stood, head tilted, looking intently toward a shining copper statue mounted within the circular wall. Allan was struck by the picture. From his intent attitude, Doc Pakkerman might have been praying to that statue. He was at least talking to it.

He spoke aloud, and Allan's nerves quivered at the sound of Pakkerman's voice.

"If you could grant me a wish—"

The statue had a familiar look. It was a copper figure, about four feet tall. Its arms were moving. It was an ancient Egyptian fire tender, and its arm, holding a flail, moved back and forth in time with the rise and fall of a flame from its base.

Where had Allan seen such a statue before? At Madam Lasanda's studio, of course! The name *Ksantajai-ba* came to Allan's lips.

This was certainly the very same character, though a much larger statue. The very glow of the flail was exactly as Allan had remembered it from the fortune teller's weird studio.

"If you could grant me a wish," Pakkerman was saying *"let me die!"* He lifted his head. There was bitter pleading in his low voice. *"Oh, I know you're only a mass of metal. Why do I expect anything of you? Only because there is no hope anywhere else. No living man in all this dark world who would understand my wish. I am a tool. A puppet. A destroyer. The work I am about to do*

for the Scravvzek will leave its scars upon the world forever. If there is any way for me to die, may the gods grant—"

SOMETHING disturbed him. He must have somehow sensed Allan's presence. He broke off. He turned slowly. There was a small fountain built into the wall. Near it was a glass. He drank absent-mindedly.

Only twenty feet from him, Allan stood in full view.

Pakkerman stared. His eyes widened. In an instant he must have known it was his ex-captain. Allan saw the glint of recognition. Good. The meeting had a chance to be successful, if Pakkerman would meet him and know him.

Pakkerman straightened and returned the glass to the ledge. Allan thought he was going to step forward for a handshake.

"Doc Pakkerman!" Allan called. "I've come to see you, Doc. You do know me, don't you?"

A genuine glow of pleasure came instantly to Pakkerman's strong, intelligent face. His scarred right eyebrow lifted.

"Captain?"

The glow of pleasure went off like a light. The great green-lighted fingertips of the Scravvzek came slicing out of the darkness to catch Pakkerman in their grip. From his ankles to his shoulders the fingertips pressed. Fingertips the size of saucers, six at each side. The invisible hands were there, holding him tight.

Pakkerman had taken one step toward Allan. Now his face became an expressionless mask. He moved away, slowly at first, then briskly. He marched through the middle arch toward the cone.

Allan tried to say something more,

but for the moment he was seemingly paralyzed.

He turned to see that Jimmy and Sue were watching from the path. Sue was half hypnotized.

Jimmy broke out of his freeze and bounded toward his old hero like a terrier about to be ignored by his master.

"Doc!" Jimmy called.

No answer. The fingers of the Scavvzek were forcing Pakkerman up the slope of the cone.

"Doc. It's me. Jimmy Ruggles. Don't you know me?"

Pakkerman didn't even turn his head.

"Remember, Doc, we sailed the seven seas together, and a long time before that I used to do odd jobs for you back in Maple City.... Carried out your ashes.... Washed your windows.... *Doc! Doc! Doc Pakkerman!*"

Pakkerman marched on as if he had heard nothing. He climbed up the slope, and soon he was disappearing around its curved surface.

At last only his high shoulders were visible. Just before he disappeared, Allan saw a faintly defined ball of orange fire appear over his shoulders and head. The glow reflected in a brilliant splash of light from the mirrored surface of the cone. Then Pakkerman and his burden of fire disappeared from view.

Jimmy came over to Allan, his eyes downcast.

"He didn't even look at me."

"I don't think he heard you," Allan said. "Don't worry about it. He'd have spoken if he could have."

"Honest, you think so?"

"I'm sure of it. That power had him. He started to talk to me. He called me captain, and then it got him."

"Do you think he knew I spoke to

him? Do you suppose he wants to renew old acquaintances?"

"I'm sure he does," Allan said. But in his private thoughts Allan was afraid that in reality Pakkerman wanted only one thing—an end to his miserable, haunted life.

CHAPTER XXXV

SUE CARSON said, her eyes glistening from her too ardent tour of thousands of mirrors, "I knew the world was big, but I never knew it was *this* big. Now that I'm getting the bang of this universe, I can see it's not so impossible to spot the people you're looking for. I'm off again. See you later, boys."

"Where you going?" Allan asked.

"Try to find my New York agent, to see what's cooking."

"Don't tell me you think you could ever locate any one person in this motley mob."

"Sure, I already found someone I know. Those Maple City boys and their mayor. They're up in a plane. They've got a good lookin' woman—"

"The Maple City Mayor? Really? One man out of two billion?"

"Where'd you find him? In a poker game?" Jimmy asked.

"Back in that icy blue section. In a plane. You'll see all kinds of airplane crowds back there if they haven't blinked off."

"Come on, let's see this!" Allan said. "Lead me to it."

The three of them hurried over the illuminated surface and presently Sue pointed out the section she had seen before. Among the thousands of air tourists under their feet she singled out a small group of familiar faces.

"There," Sue said triumphantly. "Out of all the world's population, I would bump into pictures of those Maple City boys."

"Sue, this is a piece of luck!" Allan said. He got down on his hands and knees to study the faces.

"And there's the woman," Sue pointed to one side, "you can tell from the background that she's riding in the same plane. Say, she *is* a picture. She certainly knows how to dress."

"Madam Lasanda!" Allan snapped his fingers. "Look at this, Jimmy! What a break! We've bumped into the fortune teller who sent me here."

They listened, fascinated. They saw that the dark-eyed lady was trying to get a moment alone to talk with a fancy little copper statue she had taken from her case. The Ksentajai-boa! The men around her paid no attention to it. They were hounding her with questions. Were they on the right course? Where would they expect to find a mountain over a lake and an eye in the sky?

"Keep going," they heard Madam Lasanda say. "I've promised to direct you to the spot. But don't expect to lean on me after we get there."

They didn't. Listening to the private whispers Allan came to the conclusion two of the gang meant to ditch her somehow when the time was right.

Yippee looked up at Allan and then down at the attractive face of Madam Lasanda.

"What's this she says about an eye in the sky? She must be bringing them here!"

"Sure as my name's James Ruggles," Jimmy said. "We're going to have company. Gosh, the mayor an' the boys!"

A little later Allan saw Madam Lasanda take a photo from her pocket-book. The face was familiar.

"Look!" Jimmy whispered, "She carries a picture of Doc Pakkerman."

"The fortune teller and the Doc!"

Sue murmured. "Who'd have thought it?"

"That explains a lot," Allan said. He gazed at the mirror of Madam Lasanda with new respect. "No wonder she was so interested in the mysteries of this evil force. She's had an angle on this business all along.... Well! If she comes here, maybe she can give us the help we need."

SUE WAS shaking her head. "When she sees what goes with her old boy friend, she'll go mad. Utterly mad. Take it from me, I know what I would do."

Jimmy raised an eyebrow. "What you would do *if what?*"

"Quiet," Allan said.

Under his breath Jimmy said, "I didn't know Sue had a boy friend."

"If I had a boy friend, I mean," Sue added. "If—"

Allan commented dryly that he didn't like conversations that ended on *if*.

Their talk came to an abrupt end. A splash of yellow sparks came flying out of the air and landed on the surface of the cone about thirty yards from where they were standing. The blobs of fire hissed as they struck the glass. Slowly they burned themselves out.

Sue caught Allan's arm and gave a little terrified cry.

"We'll see what's happened," Allan said. "Come on!"

Sue and Jimmy followed him as he bounded over the mirrors to the place where the sparks had struck.

"Look!" he called. "The people in the mirrors got hit, a whole bunch of them."

On their hands and knees, Allan, Sue and Jimmy studied the pictures. It was a bus load of people. A bad highway accident had just now caught them. Fire engulfed the bus,

and there was hell on earth for the victims. The sounds came through faintly at first, then with hideous clarity—screams of the victims.

"Come away!" Sue said. "Come away! There's nothing we can do."

Why had it happened? Allan believed he knew. The Scravvzek was playing his game. The rain of sparks from the point of the cone brought some sort of disaster where they struck.

"Look out. Here come some more!" Jimmy yelled.

From the top of the cone an eruption had begun. Pakkerman must have been up there. Allan could see a sphere of orange fire moving around the point, supported on a pair of long legs. The showers of sparks were issuing from the cone itself. They flowed like a stream into the ball of fire. It was Pakkerman's arms, Allan decided, that hurled the sparks out across the sides of the cone. Like a sower, taking seeds from a basket, broadcasting them.

Seeds of disaster! On one side after another the sparks struck and hissed and dealt death.

Once that strong arm of Pakkerman flung a long tongue of red flame that lashed out like a crooked fiery sword. Bending almost double, it spent its wrath on a chosen spot.

Allan was on the run again. He meant to see what unlucky group had caught that blow.

He found an Oriental city caught in the fury of an earthquake. Buildings shattered and fell. Matchbox houses went up in flames. Thousands of people stampeded through the ripping, gaping streets. Terror. Panic. Death. Violence from a shattering earth. Furies of nature that no man could justify.

"Come away, Allan. Come away!" It was Sue, tugging at his arm again.

"There's nothing we can do."

"Pakkerman would rather die than do what he's doing," Allan said. "I'm sure of it. I heard him talking before he went into this task."

ALLAN SAW that his words had struck Jimmy for a foul blow. Jimmy stared and rubbed his cheek. His eyes didn't meet Allan's.

The game went on. Sparks fell to set off new and more violent revolutions among South American peoples. Insurrections over India. Wars among uncivilized tribes. Perverse actions on the part of mighty governments. Strike-breaking violence. Revolts. Crime waves. What a shower of evil the earth was getting at this dark hour!

Was there any way to prevent it?

A spray of sparks came tumbling down so close to Jimmy that he had to do a running broad jump to avoid being caught as they skipped along. When he looked back to see the effect, he shook his head dismally. A wave of fanatical murders were taking place, he told Allan.

"Nobody'll ever be able to understand what set that hatch of trouble goin'," Jimmy declared. "The murderers themselves will never know why they done it."

"Did it," Sue corrected.

"You het it did," Jimmy said. He blinked. "Did it what?"

"Skip it," Sue said. "Think we better get out of here before we get melted down."

"This is hell," Allan muttered. "It's got to be stopped. You can see him up there doing it, can't you?"

The three of them gazed at the point of the cone. They had ascended two thirds of the way to the summit, during their recent flurry of spark-chasing. It was still nearly a half mile to the point. But at that distance, the

figure of Doc Pakkerman could be discerned, silhouetted against the pink and orange clouds that filled the air above the cone. A mighty little giant at the top of a vast room, he was swinging his arms this way and that. The sparks would sail out through the space as if shot from a Roman candle.

"Is that the Doc Pakkerman you boys have said was such a fine heroic person?"

"In his day," said Jimmy, "he was as solid as they come."

"He ought to be chained," Sue said.

"He'll have to be killed," Allan said quietly. "I'm sorry to say it, Jimmy. But that's his own wish. He knows it's the only way to save all this suffering and death."

"You don't mean—" Jimmy broke off with a shudder.

"I happen to be here. I've seen the tragedies with my own eyes. I believe in doing what needs to be done, however disagreeable. I'll take full responsibility," Allan said.

For a long moment Jimmy just stared and made no response. Then he met Allan's eye.

"You and I ain't gonna disagree, Captain. We ain't gonna quarrel. I ain't forgot what Bandyworth said. He thinks we can be made to quarrel. He's wrong. I'm stickin' with you, an' what you say goes, Captain."

"Thanks, Jimmy. You're one in a million."

"But don't ask me to help you," Jimmy said. "I used to carry out ashes for Doc Pakkerman, long before I ever got into the navy. If you gotta do it, do it quick. An' let me go somewhere an' hide while it happens."

Allan patted Jimmy lightly on the shoulder. "You and Sue have a job to do. I want you to go back to the glide-walk, where we came in—"

"Where we set the trap with the bottle?"

"That's right. Station yourselves there and keep guard. I'll join you there later. Understand?"

Sue pressed Allan's hand. "Good luck, Captain." Then she and Jimmy hurried down the long incline.

Jimmy was low. All the way back to the glide-walk, Sue noticed, he hadn't a word to say. The big troubles had come in on him like an avalanche. After all the high hopes he had nourished for restoring Pakkerman, this new turn of events fairly crushed him.

CHAPTER XXXVI

AT THE glide-walk Sue told him to sit and rest. She worked around in the dark opening of the glide-walk tunnel, trying to find the cord they had used on their home-made alarm. To her surprise, the bottle was still there, with a length of string tied to it.

"They didn't stop to investigate our alarm," she said to Jimmy. "The rattle of glass must have bluffed them out."

In the deep darkness she could see Jimmy's narrowed eyes staring off toward the peak of the cone. She took him by the hand and led him around to the other end of the glide-walk platform. He slouched down and rested his head in his hands.

"I supposed the search party would have finished drinking the lava tubbles," Sue said, giving the bottle a slosh. "They're slipping.... I wonder if they're still wandering around the outside of the cone.... They're probably waiting on the outer edge until the fireworks—"

She interrupted herself by giving the bottle another slosh. She had said the wrong thing, certainly. The

fireworks might go on until Allan succeeded in dispatching Pakkerman. Jimmy mustn't be allowed to think of it. The bottle was a much safer topic.

"Gallagher didn't know what he was starting when he put this drink in our lunch," she said.

Jimmy didn't seem to hear her. There wasn't any use, she thought, trying to divert his mind. When a fellow has an old-time friend that has to be bumped off in the interests of world peace and happiness, he can't be expected to think of anything else. Sue had a job on her hands.

She sat close by him and put her arm around him, and said all the comforting things she could think of. It helped. Jimmy began to revive a little. He was grateful to her for understanding.

She tousled his hair and gave him a friendly little pat on the cheek.

"I'm all right, Yippee," he said. "If I could jist quit *thinkin'*. That's the trouble with people. They think too much."

Sue lifted the bottle.

"Here, Jimmy. Smell it." She removed the stopper and held the bottle up to his nose. "What's it smell like?"

"Nothin' much."

"Funny how they went for it—Bandyworth and the Green Coats. They liked it. And Gallagher—I guess he drinks it all the time."

"Are you tryin' to talk me into tryin' a drink?"

"Certainly not," Sue said, drawing back a little. "You wouldn't touch it after what it did to Bandyworth and the boys."

"What it did to 'em was nothin' compared to what we did to 'em."

"Well, anyway, you wouldn't touch

it." She eyed him closely. "Would you?"

"No," said Jimmy. "Heck, I might jist sample it outa curiosity. You want to?"

"No, thanks," Sue said emphatically. At least, she thought, she was getting his mind off his big trouble.

"I'll try it," Jimmy said, "an' tell you how it tastes."

IN THE dim light she could barely see his shadows of arms as he lifted the bottle to wet his lips.

"Good?" she asked. "Or terrible? It's probably poison."

"Try it."

"No, thanks, really. The name is enough to scare me. Lava bubbles!" She started to take the bottle from Jimmy, but he held it, and from the turn of his head he seemed to be regarding it with interest. He shook his head, apparently with distaste.

"I'll fix it up with the cord again," Sue volunteered, so we'll know if anyone else comes— Say, you must like it. You're taking another sample."

"There's not much left. Gosh-gee-whickety."

"What do you mean, gosh-gee-whickety?"

"You sure you won't try it?"

"No, thanks. It jist happens that I never—*waft*, I will sample it." Her change of mind came from a sudden fear that Jimmy might take more than was good for him. From the actions of Gallagher, Bandyworth, and the Green Coats, she guessed it must be pretty potent goods. She took the bottle from Jimmy's hands, lifted it to her lips, and pretended to drink.

"Go ahead, you can finish it," Jimmy said.

She hadn't any such thought. She'd hardly tasted it.

"Take all you want," Jimmy said. "I've already had a good sample. Go ahead, I don't want any more."

Jimmy was licking his lips. Obviously he *did* want more. His sudden appetite for the drink alarmed Sue. This was dangerous. She decided he'd better not have any more. She took a tiny sip. Was there any easy way to get rid of the remainder without offending him? She couldn't pour it out without his knowing. She took another swallow....

LATER, ALLAN hurried across the path toward the glide-walk platform. He called as he approached. No one answered.

In the dim light he found Jimmy lying on the edge of the platform in an impossible heap, as if he'd rolled off a merry-go-round and forgot to untangle himself. Sue was there too, huddled up in a corner, singing a little lullaby to herself.

"What goes on here?" Allan asked breathlessly. "Did you folks know that Sully and a party of searchers came through? They must have come right by you. And you didn't warn me. I've been dodging—are you listening, Jimmy? Don't tell me you're asleep at the switch!"

Groaning, Jimmy uttered something unintelligible.

"What? What on earth? What's he saying?"

Sue mumbled a response of sorts. "You can't come froo zish gate unless you gives zuh password. Zuh password is lava bubbles."

"Lava bubbles! Great guns. You can't mean that you two—"

"Shure do. The Green Coats come froo and lava bubbles for ush. So we been bubblin' and bubblin' and bubb—"

"Hush! Wake Jimmy. I need him.

Jimmy! Listen to me, Sue."

"I'm lisbening, Captain." Sue slapped her cheeks and made a heroic effort to come out of it. "Ugh! Go ahead, Captain, I'm listening"

"I've got to hurry," Allan said. "I've got to be ready when Doc Pakkerman goes back to the Ksentajai-bon. The statue, you know. That will be my chance. Do you follow me?"

"Your chance to murder him?"

"My chance to do him the supreme favor that *has* to be done if we're going to stop this orgy of destruction. I've found out how to get him. There's a way. I overheard Sully and the others. I should have known. The Scravvzek once spoke of it."

"You got some kind of formula?"

"That's it exactly. A formula. Nature took care of mixing it. Gallons and gallons of it. We rode over it on the glide-walk, remember?"

"You mean the Black River?"

"That's it. Water from the Black River. It's quick poison. Where's that bottle? If Jimmy'll wake up I'll send him after it."

Sue tugged at Allan's arm "No. No you shouldn't do that to Jimmy."

Allan started to shake Jimmy. Sue tried to restrain him, protesting that the poor guy needed to sleep it off. But Allan needed help, and time was short.

"Jimmy! Jimmy! I need you. Take this bottle—"

"No more, shank you," Jimmy mumbled.

"Take the bottle and go back to the river. Fill it with water from the big spring that pours in above the bridge. Do you hear me, Jimmy? I want some water."

"No water on the menu today, shir," Jimmy said happily, blinking his eyes. "Allow me to recommend our famoush drink, our famoush

green ink."

"Jimmy, you're blotto! Come out of it."

"I'm blotter ran you think, Cappen. I'm blotter from too mush Green Ink."

"Talk sense, Jimmy. Are you going to help me?"

"Not serving no sense today. We got spinach, but whass the sense of spinach? Have your meal tickets ready, boys. Jimmy Ruggles is comin' through."

Allan groaned. "He's hopeless."

"I'm hopeless, am I? I'm also soapless an' dopeless, so zhsy had to hang me ropeless."

ALLAN HAD to give up. He told Sue to let the poor guy sleep it off, and see that he didn't get into any more lava bubbles. "I'll be back after I take care of Pakkerman."

"Remember, Jimmy feels bad about it," Sue said. "Don't be rough on him." She caught his hand as he was about to hurry off. "Allan, isn't there any other way? You talked with the Doc for a minute, you said, and he was all right—"

"For a minute, yes. But this thing has him. It took him away from me before I got anywhere." Allan hesitated. He felt deeply the need of squaring things with Sue before he plunged into a deed that might be, in her eyes, plain murder. She had taken him on faith all along. He owed her a word of reassurance. "Let me tell you what I've learned."

"Please do." Sue's eyes searched him anxiously.

"There's no one else like Pakkerman, in the eyes of the Scravvzek. Of all the eighty men, he's the only one who has been found smart enough to go ahead with this evil plan of destruction. The only one. So you see—

Sully and the others have missed the boat. In the eyes of the Scravvzek, they fall short. The job belongs to Pakkerman. Now, do you see what that means?"

"I—I think so."

"It means that all that orgy of disasters that Pakkerman is broadcasting with his showers of sparks can be brought to a stop *only if Pakkerman is destroyed. He knows it. That's why he prayed for death.*"

"Wouldn't the Scravvzek find someone else?"

"Perhaps so, sometime in the distant future. But at least we could stop the deal temporarily. And that would give us time to get back to civilization and find a way to fight this thing. We're fighting for time, Sue."

"But Sully still had hopes that he would qualify, didn't he?"

"He *did*. But he won't. Just in the past hour I've seen proof that he won't make the grade. He and his party came through to find me. But while I was dodging them the Scravvzek reached down the side of the cone with his green fingers and took them in. Then and there he put them to the test. I watched and listened and I saw them fail. They don't have the brains for the job, Sue, not one of them. The Scravvzek let them go in disgust. So that leaves Doc Pakkerman right where he was—right at the focal point of the Scravvzek's deadly doings. He's the one key man, believe me."

"I believe you," Sue said. "Can I get the water for you?"

Allan said no. If she'd take care of Jimmy and watch the glide-walk, that would be enough. He pressed her hand. She wished him luck, and he boarded the upper level of the glide-walk to return to the Black River.

CHAPTER XXXVII

SUE STARED into the dimly lighted world, trying to organize her thoughts. She had indorsed Allan's plan with her words, but her feelings were racing out of bounds. Jimmy mumbled. "Whass that you're sayin', Yippee?"

"Must be talking to myself," Sue said.

She couldn't help thinking of Madam Lasanda. A woman's sympathy for a woman. She looked across the way to the mountain-like cone, toward the icy blue section that she remembered to be air tourists. Madam Lasanda and her party, flying toward these mountains, were still visible, no doubt. Sue's curiosity was tugging hard. It would only take her four or five minutes to run up the side of the cone to that section, to see the mirror of Madam Lasanda again.

She was strongly tempted. Everything was quiet.

"Jimmy." She slapped his cheeks lightly, "Jimmy, watch the glide-walk. I'll be back soon. I want to run over to the cone for a minute."

"Gonna look in the fortune teller again?"

"How'd you know?"

"If you don't come back shoon enough, I'll join you."

All the way, Sue kept thinking how it would be with Madam Lasanda. How it would be to ride toward these mountains, looking at the picture of Val Pakkerman, not knowing that when she arrived she would find he had been killed.

How much would the fortune teller know? Would she ever be made to understand the necessity of Allan's actions? Would she always think of the words she might have said if she had come a few hours sooner?

Sue slowed her pace to a dogged

walk up the slope. She was out of breath. But now she could rest on her hands and knees. Here were the air passengers. Madam Lasanda must be here somewhere.... There were thousands of persons in flight. The variations in shades of color enabled Sue to eliminate the less hopeful parts of the flight section, block at a time.... Here, this was it.... The mayor.... the cronies.... the beautifully coiffured dark-haired woman with the mysterious eyes.

Sue gazed at the little square mirror, and the image seemed to grow larger before her eyes.

The fortune teller was sitting quietly in the plane. A fanciful object was before her, on a tray and she seemed to be talking to it. It was a little copper statue. Its arm waved a sort of wand. A weird fire from the base rose and fell in rhythm with the arm.

Sue listened. The woman was speaking to the little copper idol, as if it understood everything. This statue resembled the one among the arches, Sue observed, except that it was much smaller. Sue listened to the woman's quiet speech.

"So death has been planned for you, Val.... Planned in answer to your own pleading.... I was afraid it would happen this way.... Somehow I knew you would prefer death.... Are you hearing me, Val?.... Do you know that I am coming?.... Can you wait?.... Please wait. I am bringing the enemies who once accused you of disloyalty.... Can you wait, Val, and settle your score with them?.... Do you hear?.... Do you hear?"

The voice was faint, as if the words were hardly being spoken but only articulated in Madam Lasanda's mind. Sue's heart was beating almost as loud as the voice.

"If you can't wait, Val....then let the Scravzek power reach up and strike this plane before your life ends.... Your enemies are here, Val.... The men who started you on this awful trail—hssssh!"

Madam Lasanda lowered her eyes as if paying no attention to the motions of the copper figure. She was listening to something the men were saying.

Sue bent closer, intent on sharing Madam Lasanda's thoughts....

THE MAYOR had been pacing back and forth through the aisle for several minutes. He was aware that the plane's engines were grinding steadily through a climb to higher altitudes. The mountain peaks were almost close enough to touch. The mayor cleared his throat, thinking to attract Madam Lasanda's attention. She didn't look up. She had shrunk into her own shell, so to speak. Her directions had been polite but brief. The mayor kept wondering whether they were still on their course, but he hated to keep asking. Once every ten minutes was often enough. He was making a great effort to be patient.

Bill Gavor and Charley were in a huddle at the rear. They called Mayor Channing to join them.

"You see how's she's been watchin' that doll, Mayor? She's even been talkin' to it."

The mayor squinted. "It's some kind of a magic gadget. She always watches it."

"Ask her what goes on."

"I've tried." The mayor shrugged his fat shoulders.

"Yeah. She always gives you twisted answers, I've noticed. You get nowhere. I don't like it."

Bill Gavor whispered. He gave a cocksure gesture. He knew how to

get the answers he wanted. "There's always a way, boys. If you told her we had to throw overboard every pound of extra weight, she'd sing a screech-song, only quick."

"She'd claw your eyes out," Charley said, "an' jerk the hair outa your head." He passed his ham-like hand over his own egg-bald dome as if to remind himself that he wouldn't be the loser, in case any rough stuff started.

Madam Lasanda might have been trying to hear their whispers, the way her eyes turned. Now she motioned to them sharply.

"We're very near our destination," she said. She told them that the tall spike-shaped mountain peak straight ahead was the very mountain. "Look closely and you'll see the giant eye."

"I don't see it.... What tall tower of stone?"

"That needle spire straight ahead."

"I don't see it," Mayor Channing said.

"That's strange. I don't know how you could miss it. We're flying straight toward it and it's the highest—"

THE PILOT had caught his cue from Bill Gavor by this time and he yelled back, "Throw off something! Quick! Throw off some ballast. We've got to climb higher. Quick. Anything!"

Bill Gavor dashed back, snatching at suitcases, then shaking his head, grabbing for something else. His flurry brought him straight to Madam Lasanda and he seized the little copper Egyptian fire tender.

"Here's something heavy!" He passed it to Charley, who was too flustered to hold it. The weighty little object would have fallen, but Madam Lasanda was right after it, shrieking.

"No, not that!"

She snatched it and clutched it as if it were her own life in the balance.

"Come on with it!" Bill Gavor demanded. "You want us to crash?"

Madam Lasanda looked ahead and what she saw beyond the plane made her scream.

"We're going to crash! We're going to crash!"

Her wild cry was seemingly without reason. Her long painful shriek of warning preceded the disaster by seconds. The mayor and his two boys looked ahead and saw nothing. The pilot apparently had all the altitude he needed. Was Madam Lasanda's cry only a trick to divert Bill Gavor from his own scheme? If so, it was effective. Let her keep her little statue if she was going to make that much fuss over it. He'd find out later—

At the last split second they all saw. The plane was plunging for a jagged needle-like spire of rock. A blaze of color flared all around, and the Mayor caught a glimpse of the "eye"—a diamond that blazed like Fourth of July fireworks in the city park.

The eye was about a hundred feet below them. But the rocky spire from which it shone stretched up like a huge inverted icicle squarely in front of them. It was too late to dodge. The pilot shouted, "Hold tight!" He roared ahead full blast.

The propellers ripped into the spire. The concussion sounded like a crash of thunder. The plane folded up like an accordion at the top of the world.

CHAPTER XXXVIII

FOOTSTEPS sounded from somewhere back of Allan. He quickened his pace. He had left the glide-walk at the Black River bridge and

had turned "northward"—upstream. The "skeleton spring" would be found in this direction.

He hurried as fast as the dark narrow trail would permit. The thin blue lines along the water's edge crowded him hard against the ragged perpendicular walls. The stream's surface was only two feet below him. A slip into the deep would offer no danger, he decided, unless he made the mistake of swallowing some water. And for all he knew, the poison it contained was too greatly diluted to be dangerous here in the main stream.

At every moment's pause he could hear the advancing beat of footsteps. He looked for a chance to climb to a higher level. The territory was all unfamiliar. It would be a bad bet to be overtaken by an enemy on this narrow trail.

Soon he knew that it was Sully in pursuit. Sully and two or three others. They were talking in low, excited voices.

Allan came into a wide patch of light, bluish white like sunlight.

The path had opened into a sort of sky-lighted plaza. He bounded across the open space, knowing that for a moment he would be a visible target, if anyone cared to shoot at him. It was high time to give them the slip. He must leave the trail and climb. He clambered through the jagged rocks that gave him a path upward into temporary hiding. Thirty feet above the floor he secluded himself in the shadows. He could go higher if necessary. The ragged walls went up, up, up. There were miles of walls leading up to the open sky! What a sight! A patch of blue. It seemed weeks since he had seen the sky.

He was breathing heavily from the chase. He would wait here and take his chances. His pursuers would have to come out into the open for a mo-

ment when they reached this plaza. He could look down through a crevice and see them without being seen.

The footsteps were approaching cautiously now. Along with the sounds of the advancing party, Allan noted the soft sough of the winds high, high above him, echoing down like the murmur of waves inside a sea shell.

Rain could descend into this deep well. Mountain animals might even stumble down through the crevices. Along the shadowed edge of the plaza floor only twenty yards from his hiding place he could distinguish the white ribs of a skeleton—a luckless mountain goat that had chanced to climb down, or perhaps had fallen.

Again Allan bent forward to get the best possible view of lofty walls. *The spire was visible.*

The well was so deep, the spire must have reached to an elevation nearly two miles above him. It stood clearly etched in sunlight and shadow—a magnificent sight. The blue shadows of a passing cloud floated over it. The brilliant colors from the diamond were there, blazing their radiance out at the world.

ALLAN'S attention was brought back sharply. His pursuers were stalking into the lighted opening. Through his barricade of stones Allan could see them without being seen. They were a party of three—Sully and two Green Coats—armed with ropes and clubs. Sully wore that certain savage look. He was pretty sure he would be dragging Allan back at the end of a rope in another minute or two.

"Careful, now," Sully said in a low voice, trying to look in all directions at once. "There's where I thought he would be. Right there at the skeleton spring." He pointed

to the heap of white bones. "He came this way. He couldn't have come any more directly if he'd been a fish... But where is he?"

They shot a flashlight beam around in the shadows beyond the skeleton, and Allan saw that here was the string he had come to find. It was a shallow five-foot pool, bubbling with black waters that overflowed into the river. Several decaying skeletons of mountain animals could be seen in the dark corners.

"I don't see his foottracks. Do you think he went on?"

"He might have gone up," Sully suggested.

"He'd have to do some tall climbing to get out of this pit. He'd better go back and take the glide-walk up."

"He couldn't do that without bumping into us—unless he'd swim the river."

They looked at the river and shot the flashlight beam over the inky waters. Sully shrugged and looked up again. He shook his head.

"No, he wouldn't be fool enough to try to climb back to the Red Room from here. Besides, he'd come out on the outside of the tower instead of the inside. No, he wouldn't—"

Allan chanced another look into the opening that pointed to the sky. He was putting two and two together. Sue had been right, the glide-walk must have taken them through a long downward spiral that led, eventually, from the Red Room beneath the tower, to the vast chamber containing the cone of mirrors—also beneath the tower. In other words, the cone within the mountain, rising to a height of a mile and a half, pointed up to the red rock ceiling which was in turn the floor of the Red Room. The Red Room, where Gallagher held forth, was the base of the tower.

Accordingly, Allan reasoned, the

giant diamond must be directly above the mirrors of the world. How many hundreds of feet above, Allan could hardly guess, viewing it from this difficult angle. But there it was—the under-edge of the “eye”—flashing back the brilliant colors that it caught from the wide world.

His observations were interrupted by a sound that was like the roaring of an airplane.

He heard the Green Coats utter an exclamation of surprise. Sully cut them off. It was a plane. Its echoes thundered down through the opening.

It was coming closer, closer—

Allan saw it happen.

THE TWIN motors darted into view. A small passenger plane. It plunged across the patch of blue like a bullet. It might have been magnetized by the tower. It struck like an arrow aiming for a bull's eye.

Allan saw the dust and smoke of the concussion long before he heard any sounds. The tower swayed with the impact. It appeared to bend like a steel spring. He couldn't be sure, for the upper end had swung out of sight; but he saw the fan of colored light from the diamond swinging through a swift upward arc, slowly gradually, and still more gradually returning to its original position.

Then the upper part of the spire returned to view. Stones and debris sifted down its walls slowly. Near the top was the plane, stuck like the tail-end of a weathervane on a lightning rod. Gleaming in the sun, it had a sadly crumpled look; but miraculously it hung tight. The tower had served as a catapult in reverse, Allan thought.

The sounds of the crash now ricocheted down, like the crackle of thunder. Some bits of stone or wreckage kept falling, so that the deep

well of rock fused the noises into a low din of echoes. Allan wondered how the mountain goat would have sounded, coming down through that series of perpendicular walls.

Most of the falling stones were absorbed by the strangely plastic walls before they ever reached Allan's level. A few fell all the way to a sloping heap of landslide sand, only ten feet from his hiding place.

“More visitors!” he heard Sully say. “What the devil next?”

“They're getting out of the plane. I can see them,” one of the Green Coats said. “Hell, they'll fall and break their fool necks.” He passed his binoculars to Sully.

For his own part, Allan could hardly distinguish the little ant-like movements in the neighborhood of the plane. Was it possible that its passengers would come out alive? The plane hadn't ignited, fortunately. At any moment Allan expected it to come plummeting down the outside of the tower wall, bumping over the spikes of stone that ornamented the shaft like spears.

The plane stuck tight. So did the people. Some tiny object was falling, however, and as it neared the lower part of the opening, Allan thought it looked like a bottle on a tray. It was a coppery brown something, shiny, metallic.

A moment later it skidded along the sloping surface of the landslide heap and came to a harmless stop almost within Allan's reach.

The Ksentajaihoa! The midget version—the little fellow that Madam Lasanda used in her studio!

Well, that was that. If Allan had had any doubt whatever concerning the identity of the party of invaders, this item clinched his best guess.

He slipped out of his hiding place silently and crawled back of a pro-

teeting rock to a position within four feet of the little copper doll. They hadn't seen him. He hardly breathed. Had they forgotten him?

Sully's order to one of the Green Coats put a crimp in Allan's maneuver.

"See what the devil it is," Sully said, giving the fellow his orders to climb up the rocks. "Don't touch it if it looks like a bomb."

"It's no bomb. It's an oversized bookend," said the fellow with the binoculars. "Why don't you loop it with your rope, Sully?"

ONE GREEN Coat was halfway up to Allan's level when Sully began tossing the loop of rope. One lucky shot, Allan thought, and the prize would go out of his reach. But Allan intended to have that little fire tender, even if he had to come out of hiding to get it. It was something he remembered with high respect, and he didn't care to have it fall in the wrong hands.

The trouble was, he was encumbered by the glass bottle that hung from the "skeleton spring." The breaks had gone against him. He could imagine what a target he'd be for his pursuers, with a bottle of poison in one hand and a precious little copper statue in the other. In a fist fight he'd be about as efficient as a blind man on crutches.

He sprang out of his hiding place just as Sully's loop of rope alighted up through the air. The rope fell over the Ksentajaiboa—a perfect catch! Sully gave a shout. "There! There! That'll—hey, let go, you—"

The roar of curses that followed were only the excited accompaniment to Sully's actions. He and the Green Coats were surprised out of their shoes, almost literally, at the sudden darting appearance of the man they

had momentarily forgotten. Allan grabbed the rope and the statue at the same instant. He gave the rope a whipping jerk, and the end jumped out of Sully's hand.

With another whirl of his arms, Allan succeeded in lashing it out of reach of the Green Coat who was leaping for it. It was the third man—the Green Coat who had climbed up toward Allan's level—who made the daring trapeze flight. He caught the sailing end of the rope as he dove from the wall, and all his weight went down with it. He intended to jerk Allan and the statue down together.

Allan held tight to the rope and caught the fellow's weight over the projecting rock against which Allan's feet were braced. As the slack went over the edge, he slid it toward the sharp corner, holding back. The rope shredded and cut and fell apart with a pop.

Allan didn't wait to see the Green Coat spill. The break of that rope had been his lucky break. His left hand hugged the little statue close to his body, and it hadn't taken a scratch. Now the problem was to make an exit. But fast.

THE UPPER level path was lighted for a distance of something less than a stone's throw. Allan went charging around into the darkness where the path bent away from the blue-sky opening. Stones' throws were being measured in a very real way before he got around the curve. Clack! Clack! Thunk!

He was ahead of them. They couldn't throw anything fast enough to keep him from rounding the corner. Now he raced over a narrow catwalk twenty feet above the river. The semi-darkness was in his favor.

A bouncing missile struck at his

feet, and he almost tripped and fell. He was tempted to make a dive of it. Would Sully remember how well he could swim under water?

The footsteps were pounding around the lower path into the darkness. Sully was mad. He would overtake Allan on this side of the glide-walk bridge or break a leg in the attempt.

Something lying on the faintly lighted catwalk showed Allan a possible way. It was a loose stone as large as a shoe box.

He put the statuette down and picked up the stone with both hands. He hurled it out into the river, whose dark waters showed as inky blue lines many feet below him.

Splushh! The stone plunged in with the sound of a deep dive. The inky waters threw out a circle of nervous waves.

"There he goes!" came the shout from one of the Green Coats. Allan crouched and waited.

The pursuers, hurrying along the lower path, slackened their speed. Sully yelled for the flashlight. The beam cut back and forth across the surface.

"He went in right about there," Sully said, steadying the light on a chosen flurry of waves. "He'll swim with the stream."

"Hell, he'll go all the way to the bridge."

"Or will he go across?"

They shot the light upward for a glance at the probable diving platform. Then contenting themselves that they were on the trail, they made tracks for the glide-walk bridge. There, they believed, they could overtake him—unless he tried to pull a wise one and crossed the stream ahead of them. He wouldn't go upstream; there would be no future in that. If they kept the light busy

they'd locate him within the next three and one-half minutes. He couldn't stay under long.

"Later," Sully said, "we'll scour that upper trail. He probably hid that hook-end thing before he dived."

The footsteps pounded away.

Allan took his time about filling the hottle at the "skeleton spring," and he was plenty slow about returning to the cone. Half an hour later the coast had cleared, and he moved back, walking and gliding by turns, with two prizes in his possession.

CHAPTER XXXIX

HE MISSED Sue and Jimmy as he came to the station entrance to the vast cone room. He would find them later. He must take care of Pakkerman first.

He hurried past the base of the cone toward the arches far around the way. He had guessed that Pakkerman would come back for a rest as soon as his orgy of spark-throwing had subsided; and Allan had reasoned that after such a strenuous ordeal, a man's first act would be to slacken his thirst.

Was Allan still in time to plant the death trap? He saw no flying arcs of fire now. Pakkerman might have already retired, to take refuge at the fountain and the statue.

But when Allan slipped along toward the middle arch and peered through, he saw no signs of any occupants.

He set the little Ksentajaihoa down by a shadowed projection in the wall. He reached for the earthen water-glass that rested on the ledge, near the built-in fountain.

He poured liquid from the hottle into the glass—about two thirds full. He returned the glass to the ledge.

Then he moved back into the shad-

owed columns and found a place where he could hide the bottle with reasonable assurance that no one would ever find it. From the shadows he watched. He was just in time. Pakkerman was returning.

The globe of orange light came moving along with the well-known bounce of Pakkerman's walk. The globe burned dimly, like a setting sun through a thick haze. The Scrvvzek's energies—or Pakkerman's—were spent, Allan thought. This would be the right time for it to happen. Allan moved back a little as the tall form advanced toward the wall. The stride slackened.

Pakkerman paused. Allan saw him standing there tall and powerful, and tired. He drew a deep, relaxing breath. The faint sun around him quivered. It was thin, like a halo on the form of a globe. The scar over his right eye showed plainly through it. Deep-set eyes. Prominent features, at once wise and cynical and fatigued. The droop of his mouth, Allan thought, betrayed something of disgust. He must have hated himself for what he had to go through...or was his cynical look the result of his mirror-studies—the weaknesses of the human race—the hopelessness of man's struggle—the bitterness?

That would all be over in a moment, Allan thought. All of this man's painful realizations of the tragedies of an embittered world would soon be done.

Pakkerman reached slowly to the ledge. He hardly noticed that he was reaching, the action was so much a matter of habit.

His fingers took the water glass casually. He lifted it through the thin bubble-like fireglobe toward his lips.

His mouth straightened. His lips went tight. He had not sipped the

liquid. He had seen something. Something on the floor in the shadow of the wall.

HE SET THE glass aside, and like one hypnotized he moved toward the object that Allan had forgotten to hide. The Ksentajaiboa!

Pakkerman might have been picking up explosives that were in danger of blowing his hands to atoms. He might have been picking up a pet kitten. He lifted the copper object slowly, turned it about in the light.

The thin globe of orange fire around his head and shoulders vanished.

"Well!" Allan heard him say. "So! ...It must be!... It is!... Well!"

The Scrvvzek had released him for the moment, Allan knew. That sort of talk was Doc Pakkerman himself, speaking out of the deep memories of his friendship with Madam Lasanda. Allan held his breath, watching. Now would he reach for the poison?

Could Allan stand to see it happen—now?

Holding the little statue carefully in his hands, Pakkerman abruptly turned and marched toward the nearest sloping area of the cone with the two billion mirrors.

Allan followed him at a discreet distance. It was a sure thing that Pakkerman meant to examine the area of the cone where a certain fortune teller would be found.

It didn't take long. It was Allan's first demonstration of the high skill that Pakkerman had acquired in sifting the throngs. The Doc went directly to the icy blue section where air passengers could be found. He skimmed over it hastily. His eyes must have developed the qualities of a fine toothed comb. This area didn't

give. Next, Pakkerman moved over a neighboring patch, walking the length of it. Allan, tiptoeing and ducking down on hands and knees when in danger of being discovered, got close enough to identify this area as the group of air passengers who had just arrived at some port or other.

Neither did this forest of mirrors yield the desired person. Pakkerman suddenly whirled, and there was something of alarm in his manner. He would hit it right this time. Allan guessed what was coming, and his heart-beat quickened. *The groups of airplane accidents!*

A moment later Pakkerman had found her. He stooped with the sudden nervous motion of one who has found a clue to the recovery of some treasured possession. He bent to his hands and knees. He had found her.

"The tower!"

Pakkerman's low spoken words were uttered in a tone of relief, Allan thought. Pakkerman wasted no more time at the mirror, but bolted to his feet and strode off toward the glide-walk, a man who knew exactly where he was going.

Allan looked after him. If Pakkerman had ever caught sight of Allan during these recent minutes of his bold shadowing, he had given no indication of it. He had been much too intent, from the moment of his discovery of the copper statuette, to think of anything else but Madam Lasanda.

He was still carrying the little treasure as he disappeared in the darkness around the side of the cone.

"Not now," Allan thought aloud, staring after him. The business of dispatching this tool of the Scavvek would have to wait. He couldn't bring himself to murder after what he had just seen.

CHAPTER XL

SUDDENLY Allan broke out of his weird confused thoughts to remember that he hadn't made contact with Sue and Jimmy. Where had they gone? Had Sully and his men overtaken them? Allan had better pick up the trail and see what had happened.

But first, he remembered, he must do something about that glass of poison that he had left sitting on the ledge.

Two minutes later he was running like a demon.

"Sue! Sue! Don't! SUUUUE! JIMMEEEE! NO-O-O-O!!! DON'T DO IT!" He yelled like a fire alarm, and raced down the side of the cone like a bullet.

At the fountain where an inviting stream of water came through the wall and ran away in a snaky little rivulet, Sue and Jimmy had stopped with the intention of refreshing themselves.

Jimmy saw that there was a glass of liquid waiting to be consumed, and he remarked that what was good enough for Doc Pakkerman was good enough for him. He picked up the glass.

Sue shook her head. "Now Jimmy Ruggles, you had all the drinking for today that anyone ought to have, and if you take a sip out of that glass, I'll not be responsible for what happens."

"It's not ordinary water," Jimmy said, squinting at the dark liquid. "Kinda foggy. Here, Sue, you try it, an' I promise not to touch a drop if you say it ain't good fer me. Okay?"

"Okay," Sue said. She took the glass. "To you." She lifted it to her lips.

The wild yell of Allan came to

her ears from somewhere up the side of the cone. She hesitated.

"He's lookin' for us," Jimmy said. "Let's take a quick drink an' go to him."

"To you," She repeated, ignoring the yell of Allan. Again she lifted the glass to her lips, and would have drunk—

The luminous green fingers of the Scravvezek came out of nowhere and struck at her.

Two hands of six fingers each, bobbing out of the shadows along the wall, caught her around the waist and jerked her backward. The glass of liquid jumped out of her hands and fell to the floor with a crash. Jimmy stepped back as the dark liquid streamed around his shoes. Then for the first time he saw the luminous green fingers. The weird light opened his eyes wide, and his jaw dropped.

The voice of Allan cut in on their awe-struck moment.

"*Sue! Did you drink it! Did you?*" Allan was running toward them. The sight of green fingers must have escaped him. He burst through them. He clutched Sue by the shoulders and started shaking her. "*Did you, Sue? Did you drink it? It's deadly poison. Did you—*"

"*Yee-ipp-eeee!*" Sue cried weirdly, rolling her eyes at the green fingers that had her.

"You mean you *did*?"

"I mean I never. *Yee-ipp-eeee! Get me out of this!*"

CHAPTER XLI

ALLAN TORE into the Scravvezek claws like a demon fighting a demon. Most of the time he found himself fighting the air, but whenever he thought he had fought it into nothing, he'd look to one side, and

there it was again. He clawed at it like a threshing machine.

The luminous stuff had no feeling to it. His fists went right through it, even where it was thickest. Presently, unaccountably, he seemed to have got Sue out of it. She moved back, whirling with the awful terror of thinking it must still be attacking her from one side or another. But she was in the clear, now. Between her and Allan, Jimmy was fighting the air as lively as any prize fighter.

"Get her away," Allan yelled. "Don't mind me, get her away!"

Jimmy obeyed, and Sue was plenty ready to cooperate. She was wailing some half-forgotten song under her breath, too excited to know whether she was singing it or crying it. Forty or fifty yards beyond the arch, they called to Allan to get himself free.

It was strange that the fingers hadn't paid much heed to Jimmy, even though he had tried to scrap with them the same as Allan was doing. Once they had pushed him over when he had got in the way, and had rolled him like a barrel into the stone wall. But he had backed away from the fight with the feeling that he hadn't done an ounce of good.

"Get yourself out of it, captain," Jimmy yelled, "or I'll come back and help you."

Allan seemed to have eluded the fingers several times, but whenever he got almost to the arch, they tackled him again. Sue and Jimmy edged back toward the opposite side of the arch, watching the strange behavior of the phenomenon.

"I'm all right," Allan said. "It isn't hurting me. I can't even feel the heat. I'll get free in a minute or two. Why don't you folks go up the cone and find out what's happened to the mayor's party?" He struck out at an at-

tacking hand of light that seemed to be urging him toward the wall. It melted away and he stood breathing heavily. "Go ahead, Sue. The mayor and the fortune teller and their plane are caught at the top of the tower. It caught them like a rubber net. I saw it happen. Doc Pakkerman's gone up to rescue them. Why don't you—"

Jimmy was suddenly dancing with the abandon of a clown turned out of jail. "Then you didn't do it, Captain! You *didn't* kill him!"

Jimmy started forward as if to shake Allan's hand, but traces of green light were bobbing about again. Jimmy stood back.

"I was all set to do it," Allan admitted. "But after I saw him at the mirror of her—well, maybe I went soft for a minute. Besides, he wasn't under the Scravvzek glow just then. It seemed to have let go of him."

Jimmy murmured words of such relief that Allan thought he was going to blubber. Sue declared she didn't believe Allan would ever do it. There would be some other way, she said. Not violence but something else.

"I admit I thought the plan was wise and necessary," she said, tangling herself up in thoughts too big for her. "It seemed right that just a *little* violence here could save a lot of violence out there in the big world." She gestured toward the cone. Then with a comical wink at Jimmy, who was lost in the serious thoughts of what might have been, she added, "However, before we give Allan a star for kindness, we should check up. Are you sure, Allan, that you got merciful? Or did you just try and fail?"

"I did try," Allan admitted. "I had the trap set... But I did change my mind."

"How were you going to do it?"

ALLAN slapped at a lingering finger of green light and moved back a few steps. He pointed to the wall. "I had that drinking glass full of poison—"

"Oh, yes!" Sue put a hand to her throat and made believe she was gagging. Earlier, she had been too preoccupied with Scravvzek fingers to realize what had happened. "We almost—yes—both of us—we were going to—" she gave a double gulp. "I don't understand this at all. The Scravvzek saved us. We'd have died if those Scravvzek fingers hadn't stopped us! It would have happened—"

"You're damned right it would have!" another voice cut in harshly. It was Sully, marching out of the shadows, followed by his squad of five Green Coats. "Your captain meant to *poison* the two of you. He'll get you next time!"

The squad marched in as if they meant to force Sue, Jimmy, and Allan back against the wall.

Sue gave a little cry of terror. She had had about all she could stand. If it hadn't been for Allan and Jimmy she'd have taken to her heels like a runaway rabbit.

Her heart was all rabbit in that awful minute. Allan couldn't reason with them. From the hour that she had heard Allan's story of their strange behavior, she was convinced that the White Sharks meant to get him and make an end of him.

Poor, trusting guy! He'd come into this godforsaken world with the idea of helping a batch of men who had once called him captain.

Poor, trusting guy. They had him now. They had probably urged the Scravvzek fingers to get him under control so they could march in and claim him. Sue felt sick. The moment to run was already past. She was just

a rabbit, an awfully sick one; maybe a dead one.

"So we have with us Captain Burgess," Sully sneered. "Step forward, Captain. We've got a few *honors* to bestow on you." His voice was reeking with sarcasm. "We've got to reward you for many things. How about it, boys?"

The Green Coats were in for some sort of desperate dealing, Sue knew. They stood waiting for Allan to advance.

Strangely, Allan was moving a little apart from them. He was, more accurately, being moved. The Scravvzek fingers, barely visible to Sue's eyes were urging him as if they had ideas all their own.

So the Scravvzek was not in league with Sully, Sue thought. Something strange was going to happen, for sure, if Sully blundered head-on against the will of those green fingers. Apparently he didn't see them. He was blazing with anger because Allan hadn't obeyed instantly.

"Come here!" Sully roared, slapping the air with his club.

Sue thought that Allan's face reddened. No, not just his face—his neck and shoulders—it was a faint globe of orange light forming about him.

Sue pointed. She couldn't speak. Jimmy nodded. He must have seen—

Sully didn't see. He was puffing up with white rage, and the Green Coats were trying to hold him back. They muttered a reminder that he had made a boast to the Scravvzek. He was going to prove that he could set friend against friend by use of Scravvzek poison. He wouldn't murder outright. He would get friends to murder friends.

SULLY shook off his advisers and turned his verbal attack on Jimmy and Sue. It gave him a means of

ignoring Allan's defiance. He taunted them, wallowing in his deep sarcastic tones.

"You two silly babes in the woods. You let the captain lie to you. Do you think he set that trap for *Pakerman*? What trusting souls you are. He went all the way back to the Black River to fill a bottle because he knew you were in a drinking mood. The next time you turn your back—well, don't say I didn't warn you. Or will you get wise and rub him out first? Just say the word, and *I'll do the job for you, here and now.* I'm in the mood. *What about it? Shall I—shall I—*"

It was at this point in Sully's glorious murderous speech that he turned to shake his club at Allan. He stopped talking gradually. His voice trailed off into a breathless silence. He stared.

What he saw was the *form* of Allan, standing within a shell of orange fire. Green fingers of fire were pressing at Allan's sides, and there were other half visible fingertips feeling their way nervously along the stone floor toward Sully and the Green Coats.

The Green Coats were backing away, struck speechless. Sully's hard jaw sagged. The club slipped from his hands and might have clattered to the floor, but the green fingers caught it, melted it, and there was nothing but a faint wisp of smoke.

A shout from a little distance announced that Bandyworth and his search party were hurrying over the ground to join Sully. Their call received no response from Sully. Bandyworth's loud chatter choked off as he strode up. His men stared in awed silence.

It was Bandyworth who said it. His low, terrorized whisper was like the

warning of deadly lightning about to strike. He pointed.

"It's the Scavvzek!"

Sully shook his head. In a trembling voice he tried to deny it. "It's Burgess. Captain Burgess!"

Allan Burgess, staring hard through the strange world of orange fire that had accumulated around him, drew his arms up slowly. The crowd began to edge back. He took a step forward. They were scrambling over each other, now, in a panic to move out of reach.

"Stop!" Allan shouted. His voice amplified as if it had rolled through a hundred caverns, gathering thunder from every one. The arch behind him shuddered and fell into a heap of stones.

His command to stop had been obeyed as if his very voice had paralyzed his listeners. He moved forward another step and placed his fists against his hips in an attitude of confident power.

"Salute!" Allan said quietly, though the walls and ceilings rumbled from the weight of his soft-spoken command.

Every Green Coat saluted. So did Bandyworth and Sully.

So did Jimmy.

And even Sue.

"Now go, all of you," Allan said in slow-spoken thunderous words. "I'll call you when I want you."

They went, and Sue guessed that some of them would limp for weeks from the scramble of going.

CHAPTER XLII

THE MAYOR and his party were stranded at the top of the spire. They weren't very happy over it. No one had foreseen the crash but Madam Lasanda. Her warning had gone unheeded.

"It was that damn pilot's fault. He should have seen it coming." Bill Gavor muttered.

Charley Spandoak shook his head. The fantastic fact was, he hadn't seen the spire until the last split second. It had materialized out of nowhere. But even more mysterious was the strange rubber-like action of the spire. It had caught the plane like an elastic net. All five persons aboard had lived through the crash.

"This mountain is a phoney," Charley said, clinging tight to the almost vertical side, he kicked at a flake of rock. It chipped off and fell, bouncing off the mayor's shoulders on the way.

"Careful, you rotter!" Mayor Channing yelled. The whipping breeze took the edge off his curses. He called down to Madam Lasanda several feet below him. "Are you safe down there?"

"As long as they don't kick rocks in my face," she called back.

The mayor made his way down. The spire of stone was so slender at this elevation that he would have as willingly climbed down the side of a smoke stack. The plane, somewhat crumpled, was perched near the point, like a broken weathervane on a steeple. He was haunted by the fear that it would shake loose and fall any minute, and they would all be carried to their death.

"There's a shelf down here," Madam Lasanda called much too cheerfully. "Room for one or two more."

Bill Gavor shouted down, "What happened to that hunk of copper you were huggin'?"

Madam Lasanda admitted that it had slipped from her hands and fallen. She heard Bill Gavor and Charley Spandoak chuckle.

The pilot stayed with the stranded wreckage long enough to rescue

a small portable radio. He hung it on his belt before he started to descend. The boys were growling at him for crashing. He crawled around the column out of their sight and managed to by-pass them. Presently he joined Madam Lasanda and the mayor on a lower level.

"We've only got three or four hundred feet to go," the mayor remarked, looking down over the edge. "My muscles are already worn out. This is one devil of a place to be caught."

"We're alive," Madam Lasanda reminded him. "If we can get down as far as that big diamond, we might have a path or ladders or something."

The boys crowded down onto the same shelf, which mercifully held up under all the weight. The mayor began to moan. High places didn't agree with him. He was getting sick.

THE PARACHUTES had been caught in the folds of metal. The pilot insisted there was no use trying to dig them out. Besides the plane was barely hanging on. A touch might bring it down on all their heads.

"Listen," Madam Lasanda said. "I thought I heard some pounding." She pressed an ear to the stone. "It sounds like footsteps echoing up."

"Where would they come from?"

"Down in this mountain. This was where I was bringing you. This is where the Yippee girl came."

"If she's stringing us," Bill Gavor growled, "she's sure done a thorough job of it."

Charley Spandoak said he'd been strung before, but never hamstrung like this.

"We're getting nowhere," said the mayor, forgetting his dizziness. "If you boys won't figure out a plan, I will. Let's make a rope out of our

clothes and lower ourselves to that diamond. Then we'll see about that path."

"Whose clothes?" Bill Gavor asked testily. "I've got a better plan."

He kicked a rock loose and tossed it down. They watched it fall and listened for the crash. The sounds were lost in the depths.

The mayor scowled. "That's strange, I didn't hear a thing."

"If there's anybody down there, we ought to be able to arouse 'em," Bill Gavor said. He kicked at another rock. The edge of the shelf gave way and his feet went down. Charley jumped for him. The two of them went sprawling over the edge.

Luckily, the pilot caught Charley's ankles, braced himself and held tight. Bill crawled up over Charley like a cat coming out of a bathtub. In a moment everyone was back on the shelf, safe and scared—too scared to move.

"No more monkeyshines," the mayor said, "We'll sit right where we are till the wind blows us down."

Sooner or later, the mayor declared, someone would see the plane wreckage on the tower and come to their rescue. The pilot stroked his chin, doubting whether planes ever passed this way. And meanwhile, Madam Lasanda kept an ear to the side of the corner of the tower, fully convinced that the footsteps were ascending.

PAKKERMAN held the little copper statue under his arm as he hurried through the glide-walk to the Red Room. He passed Gallagher without waking him and went directly to the spiral ascent.

He bounded up the steps two at a time. Round and round and round. He knew his pace. In an emergency

like this he was good for a hurst of speed.

Halfway up to the giant eye he stopped to listen. The low snoring of Gallagher came up softly through the emptiness. From high overhead voices sounded dimly.

A rock came bouncing down on the outside. It oozed into the plastic material of the shaft and became imbedded silently. If the stranded people only knew, Pakkerman thought, they too could have dropped painlessly into the flexible shell of the tall spire and eased to a stop unharmed somewhere along this spiral ascent. But perhaps it was just as well they didn't know. It would give Pakkerman a chance to look them over before he admitted them.

Of one thing he was sure. The mirrors had told him. Madam Lasanda was in the party. Whether he was ready or not, he was about to meet her again.

Could he face her after all that had happened in the past two years?

Only the beginnings of a plan had formed in his mind. He would rescue her and would leave the rest of her party stranded until he had had time to talk with her.

He ascended to a platform twenty feet above the upper edge of the giant eye and there he emerged through a narrow door to a shelf on the outside of the tower. He looked up. He saw the plane clinging like a kite at the top of a telephone pole. He saw no persons.

He called. "*Mary! Mary Lasanda! Are you there?*"

Five heads peeped over a concealed shelf. Pakkerman smiled to himself. It was a good solid shelf, but he decided that four persons on it would be enough.

CHAPTER XLIII

SUE AND Jimmy watched through the mirrors. They saw how cleverly Pakkerman got Madam Lasanda away from the rest of the group, and they heard the moans of the mayor who, left with the boys, bewailed his fate as the forgotten man.

But it was the greeting between Pakkerman and Madam Lasanda that took Sue's breath away.

"Gee!" she whispered to Jimmy in a tone of awe. "I never say anything like that, even in the movies. Look at the tears in her eyes. She hasn't seen him for over two years. She knows he's been all wrapped up in this Scrvvzek thing, and the way she's lookin' at him—gee!"

"Look, he's tellin' her how he got that scar over his right eye," Jimmy said.

"She doesn't mind the scar. Um, what a voice. It's not just the way she kissed him, it's the way she looks at him and the way she's talking to him—umm!"

Jimmy looked at Sue. "Hey, what you cryin' about?"

"Think, Jimmy! If the captain had done what he intended to do, this wouldn't have happened. They'd never have looked at each other this way. Do you see, Jimmy?"

Jimmy saw. He knew, without Sue telling him, that the tragedy Allan had planned had been missed by a hair.

"Listen to 'em. Gosh-ding! He must be all out of that Scrvvzek spell, the way he's talkin'."

They listened spellbound...

Madam Lasanda was aware that Val Pakkerman had been under the spell of the evil power for many months past. Now he was suddenly free! Free!

He pursed his lips, trying to restrain her optimism.

"I'm free—temporarily," he emphasized. "It came suddenly. First I found *this*—" he tapped the little copper statue—"and I discovered you were here, stranded. An ideal surprise entrance. Frankly, I believe it was your coming that shocked me out of my shell."

"It was a lucky shock—and a timely one," Madam Lasanda said, and her dark eyes clouded. "Things have been growing worse all over the world. The radio reports reached us as we were flying. Disasters have been striking all over the globe. Unaccountable riots. Storms. Earthquakes."

"Oh Val, my heart bled for you everytime I heard such a report. I knew all that torment was passing through your hands."

PAKKERMAN seemed to be looking through the clouds beyond the spire. "I'm sorry, Mary. I suppose this little fire tender has conveyed everything to you. It's been bad. Very bad. I don't know how you stood it. I thought you would surely strike me out of your heart after you realized—"

"I always believed that someday you'd escape it. Now you have escaped, Val. This very day—"

"It's temporary, Mary. Someone has taken my place, just for the moment."

"Who?"

"Captain Burgess."

"Oh."

"You sent him here, didn't you, in the hope that he might do something to help?"

"Has he?"

He's raised plenty of hell one way or another. But I didn't know the Scrvvzek had him lined up. It all happened suddenly. The damned thing fastened itself on him just as

he was about to deal it a stiff blow."

"Really? You mean that the captain could actually have crippled the Scrvvzek? He's found a way?"

"I thought so—until it jumped on him and took possession of him."

"It's too bad he missed." Madam Lasanda looked at Pakkerman with sudden suspicion. "How would he have crippled it?"

Pakkerman pressed her hand, "Never mind. He didn't get to do it."

She was suddenly alarmed. "How?"

"Never mind, dear."

"By killing you?"

"Yes. That was it. It could have worked. No one but I was qualified to be the Scrvvzek's man, I thought. But I had overlooked Allan Burgess himself."

"Oh, Val!" She touched his shoulder, his cheek, his hair. She passed her fingers lightly over the scar above his right eye. Then, as if resolving to shake out of a sentimental mood, she asked in a matter-of-fact voice, "What about the captain? Will he yield to the Scrvvzek's destructive purposes?"

"Of course. How can he help it?"

"Wholeheartedly?"

"Did I—wholeheartedly?"

"I don't know," she said frankly. "Maybe you were only the Scrvvzek's puppet, against your own will."

"I'm afraid I served only too readily. The fact is, my deep hatred born out of the unfairness of the world has twisted me into something pretty cold and deadly." His face colored with the admission, and the line over his eye showed white.

MADAM Lasanda nodded with her eyelashes. She was ready to understand. But not to blame. Then—

"Speaking of your feelings toward the unfair world, would you like to

know who came along with the Mayor and me?"

The men from the shelf above were making themselves heard. Pakkerman listened to the voices. Voices he remembered. A sinister picture came back to his mind—the shadows against the white curtain—the unfair charges of disloyalty—the taunts from gangsters who had framed him. So these were two of the Mayor's boys!

"I'll be happy to meet them," Pakkerman said, narrowing his eyes and nodding slowly. "I'll climb up a few feet just to get a look at them under the sunlight."

A moment later he was gazing up at them. The mayor shrank back in a corner and pretended to be aloof. The innocent pilot listened with interest. Bill Gavor and Charley Spandak, as guilty as snakes, perspired under the heat of Pakkerman's embarrassing reminders of their crime.

They refused to discuss the matter. They had just come through a plane crash, they whimpered. And they begged, in the name of mercy to be allowed to get down out of this dizzy sky nest...

Sue and Jimmy, taking it all in at the mirrors, were glad when Pakkerman came away and left the men in their sky trap.

"I'll see what I can do for you later," Pakkerman promised in a faintly ominous tone, "if the Scrvvzek doesn't shake you down in the meantime."

Then he and Madam Lasanda were making their way down slowly, talking as they descended.

CHAPTER XLIV

THEY WERE soon inside the tower, where they were able to fol-

low the spiral path. They passed the area where the light of the great diamond bounced through the translucent walls. Their path widened into a stairs.

Madam Lasanda was taking in everything eagerly....

At a distance, Sue and Jimmy were also getting in on the party, by way of the mirrors. Sue was fascinated, listening to their talk. She sighed.

"Only a fortune teller could have such interesting things to say. I wish I could talk to my boy friend the way she does."

"You got a boy friend?" Jimmy asked.

"I mean if I had a boy friend."

"Gosh-ding-it," Jimmy gulped. "You know you always got me if you want me. Of course I'm not the kind of guy they put in the magazines to advertise collars. I'm nobody—just Jimmy Ruggles."

"Jimmy Ruggles is a swell guy," Sue said, patting him on the arm. "But I'm not really in love with anybody much, I guess."

"The captain, maybe?"

"Maybe.... Gee, I'm worried about him. I hope that Scrvvzek quits hounding him. Poor guy, he looked awfully uncomfortable when that ball of light wrapped him up. He told us not to worry, he'd shake it off.... But I don't know...."

They looked away from the mirrors, toward the top of the cone. A barrage of orange sparks showered down somewhere across a distant surface.

"Is Allan doing that?" Sue asked in alarm. "Will he start destroying things too?"

Her question caused Jimmy to bounce to his feet. He caught her hand and they went running up across the surface of mirrors.

They ran toward the top of the

cone. The millions of little illuminated mirrors flashed under their feet. Within a hundred yards of the top the luminous clouds slowed their progress.

"Captain!" Jimmy called. "Captain! Are you up there?"

The steamy orange fire clouds would engulf them if they went any farther. The ceiling looked more than ever like an expanse of ominous red sky pressing down from overhead—Or it might have been a red hot sheet of iron, catching the heat from the crater.

A shower of sparks sailed out from the steamy clouds. Their path cut a fiery curve. They skimmed under the low ceiling and drifted far out across the side of the cone.

"Disaster for someone," Sue said. "I wonder who's getting it."

"That's an awful thing for Allan Burgess to do," Jimmy mumbled helplessly. He turned, wondering as he had wondered before, why he didn't dare ascend to the point of the cone and look into the crater of orange fire clouds. But something told him that what was safe for Allan wasn't safe for him. Sue must have had the same instinct.

"We're too close to the top," Sue said. "Let's get out of here."

"What about the captain?"

"He's up there fighting around among the clouds somewhere. He's acting like he's got some destructive business to take care of, just like Pakkerman."

"This is awful," Jimmy repeated. "We ought to do something."

"We can't manage him as long as he's wrapped up in that shell of fire. . . Gee, I'm even afraid of him," Sue admitted. "How did you feel when he ordered everybody to salute?"

"I felt like saluting. . . . What are we gonna do?"

"There's only one thing we can do. Appeal to Doc Pakkerman. This Scravvzek business is his dish. He shouldn't make Allan Burgess eat it. Come on, let's find him."

THE ROCKY walls had begun to tremble before they got through the glide-walk ride. Just as they were emerging from the dark tunnel, the glide-walk went into reverse. They ran a quarter mile dash to cover the last fifteen yards, when the reverse action set in. What with Jimmy's speed and Sue's sure grip on his hand, they made it against the current.

In the Red Room they found Gallagher. They badgered him into showing them the way to ascend the tower, and they made him agree to go dig up a four-way lunch for them.

They hurried up through the spiral ascent until they had to stop from sheer dizziness. Then Sue took time out to give Jimmy a curtain lecture on how Pakkerman must not be approached. A man who had just gone through a siege with the Scravvzek might not be ready for another encounter.

"It's a delicate situation," Sue said. "Madam Lasanda has just recovered him. She won't want him to go back. But I've a dreadful hunch that the only way Pakkerman can release Allan is by going back into the thing himself."

"I'll let you do the talkin'," Jimmy said.

"If it has to be either Pakkerman or Allan, it won't be easy. Madam Lasanda would be on one side, and naturally I'd be on the other. Only I don't think anyone would quarrel. I can see her side of it too plain. She's terribly in love."

"An' what about you?"

"Okay, Jimmy, I'd just as well say

it. Sure I'm in love. I haven't known Allan very long, but I'll be honest with you—*S-s-sh!* Here they come."

The meeting with Madam Lasanda and Pakkerman was one that made Sue's heart beat too fast. She was afraid she might be looked upon as an intruder in this whole strange affair.

However, within a few minutes, Sue knew that Madam Lasanda had decided to like her, and as soon as the situation was understood, both women revealed their sympathy for each other at every turn. Then it was Madam Lasanda who pursued Val Pakkerman with the question, "What can be done about Allan Burgess?"

Gallagher lifted a puzzled eyebrow when he came to them with the food. He saw Pakkerman, free from the Scravvzek fire. He heard the question about Captain Burgess. At the same time he was aware that the quaking of the rocks under his feet was something more than his drunken condition. He plodded down the stairs, scuffling his hair thoughtfully. He looked back and muttered that he figured he was still supposed to be keeping guard, and he didn't like the way all these invaders were making a goat out of him.

Jimmy wished Pakkerman would hurry. Things were rocking. Fiery globes were coasting into view along the Red Room floor. Doc Pakkerman would not be hurried. He sat on the steps, munching slowly with his hand against his cheek and his deep eyes on Madam Lasanda. In his mind he was still revolving within the shock of leaving the Scravvzek so completely. Now he was trying to see it all from the outside.

"Are you sure it's evil?" Jimmy asked, breaking the silence Sue had imposed on him.

Pakkerman gave an outraged snarl.

It was as evil as all hell, and as dangerous as the hand of death. Why should anyone doubt it?

"Well," Jimmy said lamely, "it did save Sue an' me from drinkin' that poison. *Why?*"

"It had a purpose. Don't you see the momentary effect that had upon Allan? He saw that the thing had saved you two. So he felt kindly toward it for a moment. He was in a perfect frame of mind to receive it."

SUE WAS quick to catch an implication. "Do you mean that he could reject it if he didn't feel kindly toward it?"

Pakkerman answered that he believed so. "If a man has a good heart toward all the world, only an unusual circumstance will make him receive the Scravvzek. . . . But there are always the mirrors. If a man has watched them and come to doubt the goodness of the world, his disillusionment offers the Scravvzek a favorable setup."

"Allan didn't say much about disillusionment," Sue commented.

"But he was sure wrapped up in the mirrors," Jimmy said. "An' now he's down there tossin' Scravvzek devilment right an' left. What we gonna do—"

Sue nudged him and he fell silent. But no one noticed, for at that moment the earthquakes broke out with new fury.

They looked down over the stairs and saw a part of the red rock floor caving away. It broke like two pieces of pie in a giant pie crust, and fell slowly.

They saw Gallagher down there in his cozy alcove, munching a sandwich. One of his liquor bottles started rolling down the inclined floor. He got up and plodded after it with unsteady steps. The floor was sinking

under his feet. The bottle kept rolling out of his reach. He broke into a soggy run.

The floor went down and down, and Gallagher and the bottle went with it. They fell and were lost in a cloud of orange-colored light that came boiling up from the depths.

Half of the red rock floor remained intact through the quake that followed; but two quarters of the piecrust sank down into the vast emptiness of the cone room below. When the orange fire-clouds shifted to one side, Sue and Jimmy could see all the way down to the glittering mountain of mirrors.

CHAPTER XLV

ALL THROUGH the night the earth quivered and groaned from the furies of the Scravvzek power.

On the outside of the tower, high above the mountains, a mayor, a pilot, and two of Maple City's corrupt citizens endured a thousand deaths. All night long they believed that the plane would come ripping down over their heads at any moment. They continually felt the tower itself to be falling, though it never fell. And whenever a break in the mountain's crusts revealed a flood of fiery globes or a spray of mad comets somewhere below them, they were sure that all hell had burst up out of the center of the earth and would soon rise to engulf them.

Through that mad night the eighty men who had once belonged to Captain Burgess were his again, more than ever before. When the terrifying "eyes" of the Scravvzek came bursting through the walls with a hiss of lava, men would stop in their tracks and salute. If green fingertips chased through the ravines, men would toss them food or uniforms or

plunder from a neighbor's cave—anything that might pacify an Evil Scravvzek on a rampage. The winds roared through the caverns, and the Captain's men heard them as voices. They rushed forth to obey imagined commands. But when the actual voice of the Scravvzek thundered out with words unmistakably articulated, many was the man who froze in his tracks, unable to tremble.

The Glass Arena shattered, and great chunks of one-way glass went bouncing across the white tile plaza. The glide-walk reversed its direction with the rapidity of a locomotive's piston. Men who had entered thinking to escape violence came running out in tattered clothing.

The heavy mountain shelf with the dark green light, where Koo-Jop and his tribe had lingered to finish their rituals, broke open toward the tunnels above, sometime during the night. As death threatened on all sides, the Bunjojops made ready to march. Buni was sure he could choose an escape route for them. He might have succeeded, but a new shower of lava burst down in front of them and plastered their way shut with tons and tons of candle-drip formation.

Koo-Jop reversed the march. He consulted his gods en route and came to the awful decision. They would march out by way of the White Tile Plaza, straight past the stronghold of Sully and the White Sharks. They would, if necessary, attack their enemy on the run; but they would break out or die in the attempt....

With the first light of dawn, the mayor and his three companions decided to take their life in their own hands, such as it was. They each contributed some clothing to the cause, made a rope of it, and tried to descend. Two of them fell.

The mayor, shivering in his under-

wear, and the pilot, stripped to a similar state of discomfort, succeeded in getting down to the next shelf where Pakkerman had taken Madam Lasanda into the tower. The two "boys"—Bill Gavor and Charley Spandoak—were less fortunate. Each in turn lost his grip on the makeshift ladder and fell.

They fell through the almost perpendicular walls of the tower. The strangely plastic stone allowed them to pass through, under a blaze of early morning light from the great diamond.

Jimmy, whose sharp eyes and ears missed nothing, saw them slip through. He called out a "Hey—Look!" for Pakkerman to catch sight of the two descents. The men fell as if they were a pair of paratroopers with a destination. They barely missed the ragged edge of the broken pie-crust floor as they went down through the Red Room. Jimmy saw them swallowed up in the clouds of orange fire, and he believed they must have fallen very near the point of the great cone. Pakkerman was inclined to believe they fell squarely into the fiery crater.

"Anyway, they're goners, after a fall like that," Jimmy declared. But Doc Pakkerman wasn't so sure. He thought the Scravvzek might have had something to do with those two precise falls.

THE COMING of dawn was welcomed by Pakkerman. Jimmy and Sue saw that he was growing stronger in his faith in himself.

All night long the four of them had huddled together in the tower, fearing the awful demonstration of power. It was terrifying to think what Allan must be going through. If the Scravvzek had not, indeed, consumed him in the process. All through the

night's talk, Sue knew that Doc Pakkerman was mentally testing his own strength. "Talk to me," he would say to Madam Lasanda. He was struggling to come back to a normal view of the world, after having soaked himself in months and months of distressing mirror study. "Convince me that I should have faith in those two billion people. If I'm wrong—if they're not bent on destroying each other—tell me. . .Talk to me."

Sue saw what might come of this weird mental struggle. Pakkerman meant to go back and recapture his claim on the Scravvzek, in order to release Allan. But he didn't want to go back and sink into the old habits of destroying. If he could catch a happier view of the world, he might return as a less effective servant—more sluggish at the old business of hurling evil fires.

And so, through the hours, Madam Lasanda coached him in the happier view of the world, and she held back her tears. But she knew that he meant to return to the Scravvzek soon. And if he was not able to serve with a lighter hand, there was always the possibility of the death that he had once pleaded for.

Dawn brought forth a strengthened Doc Pakkerman. But his happier view of the world suffered a severe setback when a certain savage Mayor Channing came dragging down the steps in his underwear.

It was pretty terrible, Sue thought. The Madam had just topped her lecture with some bit of pretty poetry about what a glorious creature is man. And along came this refugee from a night of earthquakes, cursing vilely, and demanding his rights as an American citizen—clothing, breakfast, and a chance to punch Doc Pakkerman in the jaw. It had been a bad night for the mayor, and there was nothing

glorious about him.

CHAPTER XLVI

ALLAN moved freely from the crater to other parts of the great network of caverns. He moved where the Scravvzek wanted him to move. And still he was conscious of possessing a will of his own. The strange fire of Scravvzek power passed through his hands, and he cooperated. With a sense of power, he destroyed. Dust, winds, fire, hailstorms of falling rocks, clouds of gas, stretching walls and groaning mountains and hissing floods of lava—these were his works. Stupendous power to destroy was in his hands.

The ceiling over the cone broke through and Gallagher tumbled.

Allan saw the green fingers catch him to ease his fall. Gallagher limped off through the clouds of light, looking for a lost bottle.

The interruption was a trifle disturbing to Allan, but the Scravvzek forces at once hurled him back into action. He flung showers of sparks over the great cone.

A series of such interruptions occurred. Each passing interruption would momentarily break in upon Allan's growing illusion of power. His arms would stop swinging and he would walk down the side of the cone as if being strangely drawn by the memory of his normal life.

But the green fingers would urge him to go back to work. And he would bound back to the cone and whirl into action, his muscles highlighted by the shell of fire over his head and shoulders. He was naked to the waist, barefoot, and he felt like a god.

Once he paused over a group of mirrors to listen to a chorus of a thousand voices. They were singing

in a foreign tongue. He knew neither the language nor the setting. But he knew they were singing a song of hope and faith.

He ran back to the cone and continued with his orgy of destruction.

Once he came across Gallagher, wandering like a lost soul around the base of the cone. Gallagher was sniffing the air, "smelling fish," he said. There were no fish in the Black River or anywhere else in this region. What did that soggy old guard have on his mind? He saluted profusely with each hand whenever he saw Allan, and plodded on through the semi-darkness.

Allan went back to his job.

Once he heard Sully's screaming voice, and as he moved down to see what was wrong, he found Sully trying to put out the flames that rose and fell in the base of the Ksenta-jalboa. The four-foot copper statue stood solid beyond the fallen center arch. A cloud of gas was moving along within a few feet of the open flames. It was a greenish-gray cloud, spreading low along the floor, branching out like gigantic sponge. Gallagher was moving back out of its path, muttering that he smelled fish. And at a little distance Sully shrieked at him to come and help put the fire out.

Sully succeeded, a moment later, when he emerged from a cave with the bottle of poison water Allan had once hidden, and dashed it over the Ksenta-jalboa flames. The fire hissed out. Sully went on his way. The sponge cloud kept spreading. Orange globes of light might roll over it without effect, but no open flame touched it.

Green fingers urged Allan back to his work at the top of the cone.

ONCE he saw the two Maple City "boys" come falling down through

the overhead opening. The green fingers caught them and carried them away.

Once he paused, steaming with sweat, above a group of mirrors whose voices were reciting something very familiar. School children. They were pledging allegiance to the flag. He listened. He watched a certain boy—a lad with keen eyes of vision. That boy was dreaming a dream of helping his country grow into new strength and the great glory of being a fine neighbor to all the world. It was a good dream.

The fingers of the Scravvzek had to force Allan to come away.

But now Allan hurled the showers of fire with less heart. Why was he destroying? He moved automatically. He wondered.

Had he wanted this honor? Had he subconsciously craved this sense of power? Had it come to him because he had mentally invited it? If so, why? Was it because he wanted to impress the men who used to call him captain?

All right, he *did* want to impress them. They were asking for it. They had become so depraved, living down here, that all they hungered for was a place in the eyes of the Evil Scravvzek. They reveled in the orange light whenever it came their way. All right for them! Let them have it!

He hurled a volley of fire globes through the open ceiling, a veritable river of them. They streamed over the rocks, and he knew that they flowed down through the chain of caverns toward the Glass Arena. If the boys wanted a taste of Scravvzek's power, let them wade into this flood of fiery globes to their hearts' content.

Seemingly at his command, the crater poured forth an endless stream that flowed up through the

open ceiling and off into the labyrinth of caverns. It went on without Allan's touch. He edged away from the crater and drifted down the side of the cone, somewhat awed by the river of orange light that he had set into motion.

He looked down toward the great growing sponge-cloud of greenish-gray gas that was gathering above the floors everywhere, and decided that he "smelled fish." He wondered if he should be worried. The stuff seemed to be pouring out of a few small openings near the base of the cone. A few mirrors had been shattered by falling stones from the red ceiling overhead. Under all these millions of mirrors there must have been a huge chamber of this curious sponge-like gas.

Allan backed away. He moved up the cone, trying to find better air to breathe.

There was that singing again—a thousand voices. Rising notes in a stirring song of Hope and Faith. He listened....

CHAPTER XLVII

WHEN Mayor Channing entered the tower in his underwear and demanded a chance to punch Pakkerman in the nose, the doctor smiled and asked for a postponement. What the mayor needed was clothing. If he and the pilot would climb back up the stairs toward the giant eye, they would find the answer to all their needs in a certain niche in the wall.

"After you've dressed and eaten," Pakkerman said, "You're to come back down to this observation platform and wait here with Madam Lasanda. You've brought her here. I'll hold you responsible for her safety."

The mayor's fat shoulders twitched.

He mumbled that he was as helpless in this tottering tower as a fish out of water. But he accepted the order, and he and the pilot ascended.

Pakkerman left Madam Lasanda at the small observation platform within the tower, and hurriedly descended. He had not come to any decision about trying to take Allan's place. He felt the need of testing his own strength first. Could he face the rest of the eighty men, not as a Scravvzek servant but as a man of good will?

He bounded down the steps carrying the weight of a decision with him.

He picked up Sue and Jimmy along the way. They had given up trying to win his help, and had gone ahead to see what they might accomplish alone. Sue had been convinced that Pakkerman wanted to help, but was not yet sure of himself, divorced from the Scravvzek powers.

The three of them skirted the edge of the Red Room floor, and dodged the stream of fiery globes that fountained up from the big room below.

"I'm going to follow that trail of orange light," Doc Pakkerman announced, "and find out what it's doing."

"We'll go with you," Sue said. Again she was ready to depend on this man, who certainly knew his way about.

Jimmy was equally eager to follow. "Lead the way, Doc. I'm your man, you know."

At the White Tile Plaza their trail came to an end. The stream of orange globes moved through a circle. Within the loop stood many of the men who had once been Allan Burgess' crew. The rest of the gang stood on the outside of the circle of light. They had moved back far enough to resist being drawn into it.

The White Sharks yelled at those on the outside to come on in and en-

joy the bath of orange light. "The Scravvzek is giving us a free party," Bandyworth yelled. "Come on in!"

All of the White Sharks, many of the Green Coats, and a few of the Rocky Chests were determined to stay inside the circle.

Pakkerman moved up close and called to them. This wasn't good. They should get out while they could.

"Come out!" he warned. "I've been through all that. It's dangerous. It's deadly. Come out! Look at me—I'll lead you out of this world. You'll bake yourselves to death in there. Look at yourselves. The light is showing through you. Come out!"

A few of them heeded the summons and fought out of the circle.

Sully and Bandyworth jeered and taunted. They pranced around in a strange state of evil glory, showing Pakkerman that they could "take it." And apparently they could. But the others were beginning to turn to orange colored glass. The steam kept circling about them, and the light began to burn through them.

"They're turnin' to glass statues," Jimmy whispered.

Sue's narrowed eyes watched the strange effect with horror.

GRADUALLY their clothing melted away. The weird light shone through their naked amber bodies. They could no longer move or speak. They only stared like senseless statues. Through their translucent flesh, their beating hearts could be seen growing weaker until the faint motion ceased altogether. They stood there like stone.

Only Sully and Bandyworth came through unscathed. They were more accustomed to the game of absorbing the Scravvzek's light. When they saw the effect it was having upon the

others, they crossed through the trail of luminous globes and hurried off into an unlighted cavern, seeking safety for themselves while there was still time.

Sue and Jimmy had moved back with Doc Pakkerman. They helped him give orders to those of the crew who had never entered the circle in the first place. These had resisted the Scravvzek. They were willing to be talked into a plan to leave this region and go back to normal life.

Pakkerman wasted no time. He gave them orders to take a certain path and make tracks out of the mountains. They should go to the next village beyond Bunjojop and await instructions.

No sooner had they raced away than another and much larger troupe of human beings came running through the cavern valley. Koo-Jop and his tribe of nearly eight hundred were coming through on the double.

The Bunjojops bounded up through the ravine. They chased past the ruins of the Glass Arena. They strung out into a long double file as they came running across the White Tile Plaza. They expected to be attacked. They were ready with handfuls of stones. Women and children on one side of the column, men on the other, they were taking their chances against death on their way out.

It was a strange enemy that waited for them at one side of their path—about fifty of their former captors, standing naked like fifty glass statues, encircled by a stream of Scravvzek light.

The Bunjojops let fly with the rocks on their way past.

The statue-like army fell with a great clatter of breaking glass. They crashed and splintered all over the white tile floor.

From a distance Sue heard the mocking yowl of Sully. "They can't take it, the poor devils! Look at 'em splash!"

The Bunjojops made a swift and safe exit, never once stopping to investigate their easy victory en route. Before the last of the line went through, Sue succeeded in spotting Buni. She called to him, and he ran over to her eagerly.

Good little Buni! Sue gave him a quick hug. Then she and Jimmy accomplished the necessary diplomatic maneuver swiftly. They let Buni know what had happened to Allan. They made him understand that this tall man with the deep eyes was no longer a victim of the Scravvzek, and that Buni must arrange for Koo-Jop to trust him, just as he trusted Allan, so that all innocent parties escaping from this mountain could be guaranteed safe conduct through Koo-Jop's village.

Good little Buni! He understood in a flash. He smiled at Doc Pakkerman and promised that there would be good luck waiting for him if he would come to Bunjojop.

Then he bounded away to catch up with the receding trail of natives. Sue watched him move out of sight and knew that Allan would have been proud of him.

CHAPTER XLVIII

THINGS were looking up. Now,

Sue thought, was the time. It was time for Doc Pakkerman to roll up his sleeves and walk into the thick of the Scravvzek power and somehow pull Allan Burgess out of it. She believed, judging by the determined glint in his eye, that he was ready for it.

"This way," Pakkerman said.

Sue looked around. "Where's Jimmy?"

Jimmy had been called aside by someone who saw a chance to square an old grudge. Bandyworth had come at him and made a taunting remark about Captain Burgess. "If you had an ounce of guts," Bandyworth said, "you'd go and bump the captain off before he smashes the whole world to hell. If you had any guts—"

Bandyworth had said the wrong thing. He thought Sully was back of him, ready to back him up, and together they would get Jimmy in a corner.

But when Bandyworth looked around for a team mate, Sully wasn't there.

"Wait," Bandyworth said, as Jimmy came at him, fists doubled. "Don't misunderstand me—"

Jimmy struck three blows, and Bandy turned three summersaults and rolled into the pit where Jimmy and Allan had once been held prisoner.

It was a fair tumbling act, Sue thought, as she caught Jimmy's arm and marched him away. And a lucky thing for Bandyworth that the pit was there. A moment later, luminous green fingers lifted the lid from the floor of the White Tile Plaza and scooped the pieces of glass men into it. The fingers scraped over the floor with the object of catching everything within reach. They scraped over the pit at least five times. The last Sue saw of them, they were making Bandyworth pull his head in like a turtle.

And where was Sully, and why hadn't he come to Bandyworth's rescue? Sully was running around through the dark caverns, shouting that he was the Evil Scravvzek. The caverns echoed back at him, and they might go on echoing his hollow cry

for years, Sue thought. For his strange behavior of the past hour had convinced her that Sully had gone off the beam. He had at last entered the dream world of his great ambition. *In his crazed mind he believed that he was the Scravvzek.*

"Don't look at him," Pakkerman said, leading them on toward the Red Room. "He's gone." Then, "Wait for me here. She's calling."

Pakkerman went dashing up the tower stairs. Sue and Jimmy waited. Another delay.

The brilliance of the great diamond showered through the tower and sifted down through the broken floor. Today, for the first time, Sue realized, the light of the sun, passing through the eye of the tower, was falling directly onto the cone of two billion little mirrors. For the first time—

Sue was struck by the thought. Something that Pakkerman had told Madam Lasanda last night now returned to her thoughts.

PAKKERMAN had huilt that great diamond-like structure in the wall of the tower. He had used the Scravvzek's might for some of his own purposes. His theory had been that the sunlight from the outside world would give the mirrors a different quality.... But he had never completed his plan.

"Why not?" Madam Lasanda had asked.

"Because the Scravvzek influence had begun to dominate me. My plan had been to remove the floor. I was going to be able to see the world through rose colored glasses, so to speak. But the disillusionment of watching the people through the dark light of the Scravvzek influence got a grip on me. So I never went through with the plan.... But look! Allan

Burgess has done it in his first hours of Scravvzek power. And I believe he knew what he was doing. He had every reason to know that the cone was directly beneath the tower, and that only a sheet of red stone held back the good light. Tomorrow, when the sun shines down through, a new influence will begin. It may take years—"

So Doc Pakkerman had spoken last night, up there on the little tower platform where he had stationed Madam Lasanda for safe keeping.

As Sue and Jimmy waited, they remarked upon those words. Looking down into the vast cone room, they wondered whether a new influence had begun that would take years.

"The orange light is kinda thin down there now," Jimmy said. "I can see some mirrors, but I'm darned if I see 'em very far. There's a big cloud packin' in all around. You see it, Sue?"

"Sure. You mean all that greenish gray stuff. Gee, I wonder if Allan's still down there alive."

"Let's go down, Sue. It can't more'n kill us. We've waited for Doc Pakkerman, an' waited—"

"Listen!" Sue said, looking up into the tower. "You hear what I hear? The mayor and the madam are having an argument. It's a good thing Pakkerman's on his way up. Look, Jimmy!"

They could see the mayor and Madam Lasanda at the edge of the little platform. She was backing away from him. He was trying to get something away from her. Yes, and he got it, and threw it over the edge.

The object came flying down through the center of the hollow tower.

"Yeah, it would be that!" Jimmy grunted. "He hated that gadget." They watched the little Egyptian

fire tender as it fell past them. Sue could see the little arm still waving back and forth in rhythm. The low blaze was burning. It flared brighter as the little statue descended into the shadows of the cone room.

"It's gonna fall into that greenish cloud," Jimmy said. "Look at it blaze—"

It struck the sponge-like cloud, and fifty trails of yellow flame leaped out wildly in all directions. Sue and Jimmy jumped back.

Suddeny the whole immense world beneath them heaved with a thunderous explosion. The fire billowed up with an angry roar. Sue started to fall backward. Jimmy caught her and buried her face in his chest. Together they hugged the wall. Sue held her ears.

Minutes later she was still holding her ears when Jimmy yelled for her to come on.

"Where?"

"Up the tower. Pakkerman called us. He said to come up."

"Pakkerman!" Sue said shaking her head dizzily. Why hadn't Pakkerman tried to get Allan out before this dreadful thing happened. "No, I won't go. I'm going to find Allan."

"No," Jimmy shouted. "You and I are going up. Pakkerman's going down. Look!"

Sue shook her head. The fire was all down below, now, burning all around the base of the cone. Heat was crackling up through the broken floor into the open shaft, which acted as a flue. She peered upward dizzily to where Jimmy was pointing. She saw Doc Pakkerman climbing over the rail of the little observation platform. Madam Lasanda made a futile gesture of trying to hold him there.

Pakkerman dived down through the shaft, through the broken floor, into the flames.

CHAPTER XLIX

THE TOWER itself did not burn, but it slowly melted away at the base, so that gradually it sank.

Sue and Jimmy waited with Madam Lasanda, the mayor, and the pilot, on a little shelf, on the outside, a few feet below the edge of the diamond. From this lookout point they watched the Bunjojops come to their rescue. While most of the tribe waited on the mountain trail, Koo-Jop and thirty picked men came back to the ledge across the pit from the sinking tower. It was a matter of timing, Jimmy observed, but also a matter of good muscles. And most of all, a matter of every man's faith in every other man. For the Bunjojops were building a human bridge.

When the time was right, they swung out and attached the lower end of their human chain to the side of the tower. They climbed to keep pace with the tower's sinking.

When the time was right, Jimmy and the pilot ushered Madam Lasanda and Sue and the mayor across to the ledge safely. Jimmy followed the pilot across and planted his feet on the firm mountainside. The mayor grumbled that it was a damned undignified way to get out of a jam, and he cast unappreciative eyes toward the natives who had risked their lives to help him. Jimmy bristled and thought, "Just one slurring remark out of him an' he'll go down in that pit, the same as his boys did."

Fortunately for the mayor, he said no more; and when he stood by silently while Sue and Madam Lasanda expressed their appreciation to Koo-Jop, Jimmy decided that maybe—just maybe—the mayor was a little bit ashamed of himself.

Sue wouldn't go on. She was all for



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going down into the caverns again, and so was Jimmy.

Madam Lasanda tried to restrain them. She followed them back to the nearest cavern entrance, pleading with them not to take the risk.

"Please, friends... I've studied the Scravvzek ever since I came here two years ago hoping to recover Pakkerman... Listen to me. I've never told anyone this before, but when I made that former trip to this region, I left heartbroken. You see, I went into these caverns. I called for Val, and he knew I was there looking for him... But he never came out to see me. Can you imagine how heartbreaking that was for me? Believe me, if Allan is still down there, alive, in the hands of the Scravvzek, he will not let you find him, even though you look for days."

"And if he isn't alive?" Sue asked.

Madam Lasanda nodded. "It's much better to believe him dead.... For a long time I believed Val Pakkerman to be dead.... But when I learned how to understand the little Ksenta-jaiboa, given to me by some pojak who had explored this cavern world, I began to know that there was still a chance."

SUE straightened, though she was trembling. Jimmy stood strong at her side. She drew a slow breath of resignation.

"I guess I understand," she said slowly. "You really aren't foreseeing any hope at all, are you?" She studied the mysterious light in Madam Lasanda's eyes. Was the fortune teller holding back something. "Or are you?"

"There's just one thing I can tell you that looked hopeful for a moment. My last communication from the Ksenta-jaiboa, before the mayor took it out of my hands and threw it

down, was something about Allan."

"Allan—" Sue echoed. "What was it?"

"He was moving back and forth between two groups of mirrors. School children giving the flag salute, and some foreign group of singers, singing a song of hope for a better world. There was hope in that for Allan, don't you see. A Scravvzek servant who stops to get interested in things like that simply doesn't fill the bill.... So—"

"So you think—"

"I don't know. But I believe Val Pakkerman wouldn't have dived into that fire if he hadn't believed the Scravvzek was ready to take him back."

A shout from the cliff echoed down to them. Buni came on the run bearing news.

"Tower stops melting! Stops sinking. Tower stands still again."

A few minutes later everyone was shouting, for up from the cavern entrance came Val Pakkerman and Allan Burgess, arm in arm. They were half naked and streaming with sweat, but they were alive and they were both free.

Sue tried to yell "Yippee," but she broke down and cried instead. Jimmy Ruggles did a little harmless blubbering himself. Koo-Jop had to take the whole party under his wing to get them started back toward the village of Bunjojop, where everyone would have a chance to eat, and sleep, and get a change of clothing, and figure out a way to get back to the United States of America.

Somewhere along the way, Doc Pakkerman and Allan told the fuller story. They had both been rejected by the Scravvzek as unfit. The light of day had found its way into the crater, and the impact of Pakkerman's eye of the world had struck hard.

down with it. Where, no one knows."

"Ironically," Allan added, "I owe my life to his last act."

"And Bandyworth?" Jimmy asked presently.

"When last seen, Bandyworth was sitting in a pit, playing peek-a-boo with the green fingers of an invisible Scravvzek hand. Nothing serious. After he gets over his scare, he'll declare himself governor, commander-in-chief, and king over the caverns, and he'll have the time of his life lordling it over his one subject, Gal-lagher."

Pakkerman chuckled lightly and excused himself to talk with Madam Lasanda. He wanted to let her know that he had seen her, on her previous trip to the caverns two years before, and had been unable to talk with her—for Scravvzek reasons—and that scars from that emotional strain would last as long as the white line over his eye.

The most worried person on the plane trip back to America was Mayor Channing. Sue learned that he was in so many deep dilemmas he couldn't eat or sleep. He was going to have to give Maple City a bang-up meeting of some sort, but how could he talk fast enough to whitewash himself and his boys while he bestowed the honors to the deserving?

"Worst of all," he moaned, "I can't figure out who's going to get that ten-thousand prize for unselfish service in the name of Maple City.... No, that's not the worst. Worst of all is, what are the rest of the boys going to say when I tell them they don't get it for themselves? Oh, hell, help me, Sue. Help me, Madam Lasanda."

Sue wasn't listening. She had just edged unobtrusively into another conversation of much greater interest to her. She heard Jimmy speaking in the seat just ahead of her.

"But gosh-ding-it, I can't get up the nerve to propose to her. How 'bout you proposin' for me?"

"Okay," Allan said, very cheerfully and with an artificial note that made Sue suspicious. "Okay, I'll propose.... You want me to marry her for you too?"

"Well, I'm awful bashful," Jimmy said. "Would you do it for me?"

"Anything for a friend, Jimmy. Fact is, it'll be a pleasure."

And that was when Sue almost upset the plane by leaping over the back of the seat, grabbing Allan around the neck, and shouting a "yee-ipp-eee!" that would echo all the way across the Atlantic.

THE END

ITALIAN PIPELINE

By William Karney

★ ONE OF the marvels of modern science is the vast water system stretching from the western slopes of the Italian Apennines to the southeastern part of the country. This series of pipelines covers an area over 8,000 square miles!

The astounding feature of this water system is that it requires no reserve reservoir, since it has at its mouth the great Caposile springs which seem to spout water eternally. The main stem of the pipeline carries water for a distance of some 151 miles. A portion of this distance is through a 9.1-2 mile tunnel that runs through the Apennine ridge. Other tunnel portions total some 67 miles.

★ The main conduit has a capacity of some 110,000,000 gallons per day, and water is distributed through the main conduit and its tributaries to some 3,000,000 people in 200 communities. The overall length of the project is an estimated 841 miles of main and branch pipes, and 550 miles of distribution sections. Or a grand total of some 1,391 miles of pipe!

Of course, in so far as capacity is concerned, the great Catskill aqueduct produces some 500,000,000 gallons per day to New York City, but nonetheless, Italy can well feel proud of its scientific achievement in one of the world's great water systems.

• • •

GIN RUMMY GENIUS

★ By June Lurie ★

A POPULAR subject for recent scientific discussions, has been the machine proposed by Mr. Norbert Wiener of MIT, to play the game of chess. This hypothetical machine has not yet been devised, but it is far from the realm of impossibility and very likely we will see its eventual appearance.

Meanwhile it has also been proposed that machines be designed to play games ranging from checkers to gin rummy and poker. Such a machine—for gin rummy—is actually in existence. Well, it is not quite—but to all practical intents and purposes, such a machine is used. Actually the machine is an automatic calculating machine like the ENIAC. This device is simply a complex setup of relays, electron tubes and wires, the whole capable of extremely rapid numerical computation.

To operate it in a gin rummy game is simple. A conventional gin rummy game is played between two people who deal, shuffle, score etc. just as they would ordinarily. The only difference is that one of the players consults the calculating machine for every move he makes such as choosing the right card to discard. This machine automatically computes the odds on that being the right card, and it does so so rapidly that the game need hardly be slowed down a bit! The result is that the one who used the machine will always win, if it is at all possible to do so—this naturally depending on how the cards fall. Therefore it is no exaggeration to say that the machine plays the game. Now it is only a matter of mechanics to invent the automatic machinery for handling and reading the cards, and then truly will the machine be the player.

Of course the practical applications of such a mechanism are questionable—but a little reflection shows that with such a machine, problems which have hitherto been impossible because of the length of them in chance, are now capable of being solved. Besides, scientific "impracticalities" have a happy habit of suddenly turning out to be useful.

The greatest interest as far as chance and skill are concerned is in the as yet hypothetical chess player. It has been rumored that a couple of scientists are at work designing one. It will be interesting to see what a real chess player can do against a machine. Wiener maintains that an average or mediocre player simply won't stand a chance.

What a century this is becoming. Even the machines are smarter than men! Seriously though, it is a dead certainty that no matter how good machines are they will never usurp the major function of men's minds—thinking!

THE END

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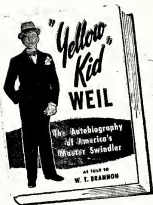
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From this he progressed to elaborate set-ups which involved fake money machines, bogus mining stock, off-color real estate deals, and luxurious gambling houses. He rented suites of offices and even entire buildings, completely furnished, and operated by stooges hired to impress his prospects. At one time he operated both a bank and a hotel. He was famous for the elaborate detail with which his schemes were planned and carried out.

His favorite prey was the man who already had

plenty of money but wanted more. To such men Weil would pose by turns as a banker, a mining engineer, a famous author, or a wealthy broker.

His story is not doctored nor whitewashed. The adventures of this master rogue are stranger than any fiction, and they are set down just as they were related to W. T. Brannon, famous writer of true detective stories.

The "Yellow Kid" takes you behind the scenes of the get-rich-quick confidence games. He reveals how victims are found, how the build-up works, and how the switch-off system keeps them from becoming suspicious.

This book will tip you off to the methods of swindlers and, as Eric Stanley Guedner says, "It is required reading for everyone who wants to keep from being a sucker."

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